

DEPARTMENT OF RAILWAYS AND CANALS

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# CANAL STATISTICS

FOR THE

SEASON OF NAVIGATION

1914

*PRINTED BY ORDER OF PARLIAMENT*



OTTAWA

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EXCELLENT MAJESTY

1915







*To Field Marshal, His Royal Highness PRINCE ARTHUR WILLIAM PATRICK ALBERT  
Duke of Connaught and of Strathearn, K.G., K.T., K.P., etc., etc., etc.,  
Governor General and Commander in Chief of the Dominion of Canada.*

MAY IT PLEASE YOUR ROYAL HIGHNESS,—

The undersigned has the honour to present to your Royal Highness, Canal Statistics for the year ended December 31, 1914.

All of which is respectfully submitted.

F. COCHRANE,  
*Minister of Railways and Canals.*







To the Honourable F. COCHRANE,  
Minister of Railways and Canals.

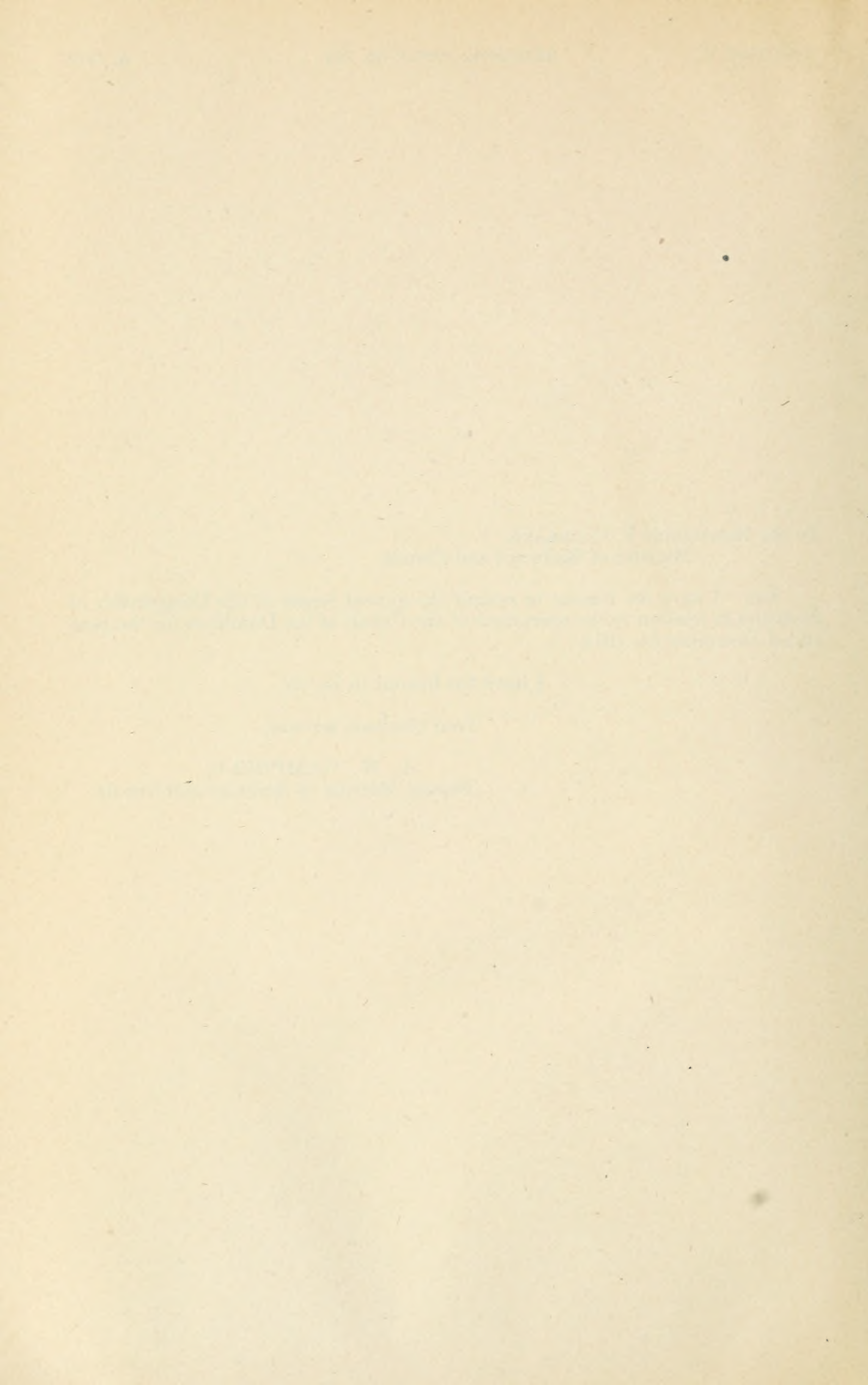
SIR,—I have the honour to submit the annual report of the Comptroller of Statistics in relation to the operations of the Canals of the Dominion for the year ended December 31, 1914.

I have the honour to be, sir,

Your obedient servant,

A. W. CAMPBELL,  
*Deputy Minister of Railways and Canals.*







OFFICE OF THE COMPTROLLER OF STATISTICS,  
OTTAWA, February 10, 1915.

A. W. CAMPBELL, Esq., C. E.,  
Deputy Minister of Railways and Canals.

SIR,—I have the honour to submit herewith Canal Statistics for the year ended December 31, 1914.

The volume of traffic through all the canals of Canada during the year was 37,023,237 tons, as against 52,053,913 tons in 1913. There was therefore a decrease of 15,030,676 tons.

Following was the distribution of traffic, by canals, during the year 1914, with the increases and decreases:—

|                       | Tons.      | Increase. | Decrease.  |
|-----------------------|------------|-----------|------------|
|                       |            | Tons.     | Tons.      |
| Sault Ste. Marie..... | 27,549,184 | .....     | 15,100,140 |
| Welland.....          | 3,860,969  | 290,255   | .....      |
| St. Lawrence.....     | 4,391,493  | 89,066    | .....      |
| Chambly.....          | 436,905    | .....     | 118,697    |
| St. Peters.....       | 54,180     | .....     | 17,334     |
| Murray.....           | 83,907     | .....     | 96,669     |
| Ottawa.....           | 335,132    | .....     | 30,306     |
| Rideau.....           | 151,739    | .....     | 19,484     |
| Trent.....            | 67,715     | 11,915    | .....      |
| St. Andrews.....      | 42,013     | .....     | 39,282     |
| Total.....            | 37,023,237 | 391,236   | 15,421,912 |

It will be observed that the unprecedented falling-off in traffic during the year 1914 occurred almost wholly at Sault Ste Marie. Of the total decrease of 15,030,676 tons, 1,748,669 was in Canadian and 13,282,007 in American waterborne commerce. As will appear later, the decline in American traffic was very largely in the movement of iron ore from the head of lake Superior to ports on lake Erie.

It must be understood, however, that the foregoing tonnage represents the aggregate of traffic which passed through all the canals of Canada. That is to say, it is gross traffic, and necessarily includes duplication and to some extent triplication. The net tonnage, as made up by an analysis of the returns, was approximately 29,786,186 tons, of which 5,521,228 were Canadian and 24,264,958 American.

The gross traffic through the canals since 1905 was as follows:—

|           |            |
|-----------|------------|
|           | Tons.      |
| 1905..... | 9,371,744  |
| 1906..... | 10,523,185 |
| 1907..... | 20,543,639 |
| 1908..... | 17,502,820 |
| 1909..... | 33,720,748 |
| 1910..... | 42,990,608 |
| 1911..... | 38,030,353 |
| 1912..... | 47,587,245 |
| 1913..... | 52,053,913 |
| 1914..... | 37,023,237 |



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For the first time, an analysis has been made of traffic by months. The facts for the past four years, as respects all canals, are shown in the following table:—

|                | 1911.      | 1912.      | 1913.      | 1914.      |
|----------------|------------|------------|------------|------------|
|                | Tons.      | Tons.      | Tons.      | Tons.      |
| January.....   | 254        | 181        | 397        | 494        |
| April.....     | 722,311    | 77,871     | 875,226    | 554,111    |
| May.....       | 5,170,587  | 6,134,122  | 7,260,227  | 5,307,123  |
| June.....      | 5,451,549  | 6,851,248  | 7,647,189  | 6,136,657  |
| July.....      | 5,798,169  | 7,054,060  | 8,137,169  | 6,339,831  |
| August.....    | 5,778,187  | 7,159,871  | 7,625,782  | 6,261,380  |
| September..... | 5,466,054  | 6,983,913  | 7,531,379  | 6,069,946  |
| October.....   | 5,514,042  | 7,321,846  | 7,350,914  | 4,660,484  |
| November.....  | 3,657,824  | 5,369,493  | 4,891,143  | 1,470,471  |
| December.....  | 471,376    | 634,640    | 734,487    | 222,740    |
| Total.....     | 38,030,353 | 47,587,245 | 52,053,913 | 37,023,237 |

It will be instructive to observe the movement of freight by months, through each of the ten Canadian canals. The facts in that regard for 1914 and the preceding year are as follows:—



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|                | Sault Ste.<br>Marie. | Welland.  | St.<br>Lawrence. | Chambly. | Ottawa. | Rideau. | St. Peters. | Murray. | Trent. | St.<br>Andrews. | Total.     |
|----------------|----------------------|-----------|------------------|----------|---------|---------|-------------|---------|--------|-----------------|------------|
|                | Tons.                | Tons.     | Tons.            | Tons.    | Tons.   | Tons.   | Tons.       | Tons.   | Tons.  | Tons.           | Tons.      |
| 1914.          |                      |           |                  |          |         |         |             |         |        |                 |            |
| April.....     | 437,182              | 77,805    | 33,947           | .....    | 2,081   | .....   | 494         | 2,865   | .....  | .....           | 554,605    |
| May.....       | 3,939,578            | 569,909   | 655,929          | 33,517   | 60,860  | 27,823  | 6,785       | 5,726   | 4,277  | 2,930           | 5,307,123  |
| June.....      | 4,653,580            | 581,388   | 673,678          | 74,959   | 73,030  | 30,090  | 6,724       | 15,945  | 10,069 | 16,194          | 6,136,657  |
| July.....      | 4,749,845            | 618,038   | 764,625          | 74,834   | 62,902  | 28,537  | 6,017       | 11,540  | 11,160 | 13,335          | 6,339,831  |
| August.....    | 4,799,387            | 583,441   | 681,136          | 84,919   | 54,515  | 24,210  | 3,565       | 11,370  | 13,004 | 5,833           | 6,261,380  |
| September..... | 4,669,372            | 593,822   | 635,327          | 80,400   | 36,475  | 16,944  | 3,490       | 18,071  | 13,684 | 2,361           | 6,099,946  |
| October.....   | 3,355,305            | 537,729   | 626,996          | 58,830   | 31,137  | 16,633  | 10,605      | 8,315   | 13,574 | 1,360           | 4,660,484  |
| November.....  | 815,235              | 270,337   | 311,281          | 29,448   | 14,132  | 7,502   | 12,034      | 8,575   | 1,927  | .....           | 1,470,471  |
| December.....  | 179,700              | 28,500    | 8,574            | .....    | .....   | .....   | 4,466       | 1,500   | .....  | .....           | 222,740    |
| Total.....     | 27,599,184           | 3,860,969 | 4,391,493        | 436,905  | 335,132 | 151,739 | 54,180      | 83,907  | 67,715 | 42,013          | 37,023,237 |
| 1913.          |                      |           |                  |          |         |         |             |         |        |                 |            |
| April.....     | 702,618              | 103,048   | 52,955           | 571      | 5,220   | .....   | 3,332       | 7,761   | 118    | .....           | 875,623    |
| May.....       | 6,029,539            | 482,844   | 573,032          | 50,729   | 54,007  | 25,518  | 9,116       | 26,364  | 3,134  | 5,944           | 7,260,227  |
| June.....      | 6,276,817            | 487,173   | 642,803          | 87,402   | 56,554  | 26,946  | 8,988       | 31,632  | 9,834  | 19,038          | 7,647,189  |
| July.....      | 6,656,867            | 565,296   | 659,900          | 100,961  | 53,552  | 26,497  | 8,261       | 37,254  | 7,310  | 21,271          | 8,137,169  |
| August.....    | 6,124,104            | 570,838   | 689,712          | 95,779   | 57,069  | 27,491  | 9,132       | 31,427  | 7,185  | 13,045          | 7,625,782  |
| September..... | 6,220,171            | 492,369   | 611,969          | 87,035   | 47,588  | 23,132  | 8,251       | 16,832  | 12,520 | 11,512          | 7,531,379  |
| October.....   | 5,995,098            | 507,991   | 633,469          | 88,493   | 56,540  | 24,553  | 8,307       | 15,949  | 10,029 | 10,485          | 7,350,914  |
| November.....  | 4,017,393            | 336,425   | 412,023          | 44,632   | 34,908  | 17,086  | 9,721       | 13,357  | 5,598  | .....           | 4,891,143  |
| December.....  | 676,715              | 24,730    | 26,564           | .....    | .....   | .....   | 6,406       | .....   | 72     | .....           | 734,487    |
| Total.....     | 42,699,324           | 3,570,714 | 4,302,427        | 555,602  | 365,438 | 171,223 | 71,514      | 180,576 | 55,800 | 81,295          | 52,053,913 |



The following table will show the fluctuations of traffic through the various canals during the past five years:—

|                       | 1910.      | 1911.      | 1912.      | 1913.      | 1914.      |
|-----------------------|------------|------------|------------|------------|------------|
| Sault Ste. Marie..... | 36,395,687 | 30,951,709 | 39,669,655 | 42,699,324 | 27,599,184 |
| Welland.....          | 2,326,290  | 2,537,629  | 2,851,915  | 3,570,714  | 3,860,969  |
| St. Lawrence.....     | 2,760,752  | 3,105,708  | 3,477,188  | 4,302,427  | 4,391,493  |
| Chambly.....          | 669,299    | 599,829    | 618,415    | 555,602    | 436,905    |
| St. Peters.....       | 85,951     | 75,298     | 74,809     | 71,514     | 54,180     |
| Murray.....           | 177,941    | 163,457    | 170,081    | 180,576    | 83,907     |
| Ottawa.....           | 385,261    | 320,071    | 392,350    | 365,438    | 335,132    |
| Rideau.....           | 134,881    | 172,227    | 160,133    | 171,223    | 151,739    |
| Trent.....            | 46,263     | 57,290     | 77,150     | 55,800     | 67,715     |
| St. Andrews.....      | 8,283      | 47,135     | 95,549     | 81,295     | 42,013     |

Although tables showing the composition of traffic in detail appear in the body of this report, the following summary, by classes of commodities, will throw a direct light on freight movement in the years 1913 and 1914:—

| Canals.               | Agricultural Products. | Animal Products. | Manu-<br>factures. | Products of Forest. | Products of Mines. | Total.     |
|-----------------------|------------------------|------------------|--------------------|---------------------|--------------------|------------|
| 1913.                 | Tons.                  | Tons.            | Tons.              | Tons.               | Tons.              | Tons.      |
| Sault Ste. Marie..... | 5,253,665              | 198              | 733,910            | 62,958              | 36,648,593         | 42,699,324 |
| Welland.....          | 1,684,967              | 361              | 548,373            | 337,927             | 999,086            | 3,570,714  |
| St. Lawrence.....     | 1,545,775              | 8,269            | 460,161            | 660,226             | 1,627,996          | 4,302,427  |
| Chambly.....          | 13,432                 | 490              | 20,217             | 337,331             | 184,132            | 555,602    |
| St. Peters.....       | 15,935                 | 2,492            | 8,078              | 6,301               | 38,708             | 71,514     |
| Murray.....           | 568                    | 13               | 75,803             | 55                  | 104,137            | 180,576    |
| Ottawa.....           | 2,331                  | 3,657            | 15,901             | 186,710             | 156,839            | 365,438    |
| Rideau.....           | 3,437                  | 3,458            | 15,213             | 27,331              | 121,784            | 171,223    |
| Trent.....            | 1,840                  | 298              | 2,414              | 50,812              | 436                | 55,800     |
| St. Andrew's.....     | 377                    | 65               | 1,629              | 9,274               | 69,950             | 81,295     |
| Total.....            | 8,522,327              | 19,301           | 1,881,699          | 1,678,925           | 39,951,661         | 52,053,913 |
| 1914.                 |                        |                  |                    |                     |                    |            |
| Sault Ste. Marie..... | 3,799,337              | 217              | 487,789            | 40,956              | 23,270,885         | 27,599,184 |
| Welland.....          | 2,116,378              | 275              | 361,174            | 360,434             | 1,022,708          | 3,860,969  |
| St. Lawrence.....     | 2,020,035              | 6,905            | 297,269            | 668,775             | 1,398,509          | 4,391,493  |
| Chambly.....          | 9,248                  | 211              | 11,111             | 293,242             | 123,093            | 436,905    |
| St. Peters.....       | 11,845                 | 1,543            | 4,117              | 3,126               | 33,549             | 54,180     |
| Murray.....           | 149                    |                  | 21,605             | 430                 | 61,723             | 83,907     |
| Ottawa.....           | 3,032                  | 3,183            | 18,663             | 171,440             | 138,814            | 335,132    |
| Rideau.....           | 2,027                  | 3,010            | 13,466             | 15,041              | 118,195            | 151,739    |
| Trent.....            | 795                    | 336              | 3,043              | 62,473              | 1,068              | 67,715     |
| St. Andrew's.....     | 22                     | 1                | 288                | 6,050               | 35,652             | 42,013     |
| Total.....            | 7,962,868              | 15,681           | 1,218,525          | 1,621,967           | 26,204,196         | 37,023,237 |

The total traffic in 1914 through the Canadian canal at Sault Ste. Marie was moved as follows:—In American vessels, 86 per cent; in Canadian vessels, 14 per cent.



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It will also help to an understanding of the traffic situation to see the ratio which each commodity class bore to the total during the past five years. The following table is therefore given:—

|                            | 1910.     | 1911.     | 1912.     | 1913.     | 1914.     |
|----------------------------|-----------|-----------|-----------|-----------|-----------|
|                            | Per cent. | Per cent. | Per cent. | Per cent. | Per cent. |
| Agricultural products..... | 10.2      | 14.2      | 14.51     | 16.40     | 21.51     |
| Animal products.....       | 1.2       | .1        | .04       | .04       | .04       |
| Manufactures.....          | 5.2       | 6.2       | 4.68      | 3.61      | 3.29      |
| Products of forests.....   | 3.9       | 4.0       | 3.43      | 3.22      | 4.38      |
| Products of mines.....     | 79.5      | 75.5      | 77.34     | 76.73     | 70.78     |

## CANADIAN AND AMERICAN TRAFFIC.

The following table shows the number and tonnage of Canadian and American vessels, and also the tonnage of Canadian and American traffic, which passed through the canals of Canada in 1908 and succeeding years:—

| Year.     | Canadian Vessels. |            | U. S. Vessels. |            | Freight Tonnage. |                |            |
|-----------|-------------------|------------|----------------|------------|------------------|----------------|------------|
|           | No.               | Tonnage.   | No.            | Tonnage.   | Canadian.        | United States. | Total.     |
| 1908..... | 29,040            | 6,780,789  | 7,489          | 4,835,320  | 5,012,147        | 12,190,673     | 17,502,820 |
| 1909..... | 22,507            | 7,811,578  | 9,996          | 16,459,322 | 7,378,057        | 26,342,691     | 33,720,748 |
| 1910..... | 25,337            | 8,931,790  | 11,462         | 21,777,297 | 7,883,614        | 35,106,994     | 42,990,608 |
| 1911..... | 25,585            | 9,172,192  | 10,370         | 18,231,622 | 7,792,907        | 30,237,446     | 38,030,353 |
| 1912..... | 27,371            | 10,237,335 | 11,785         | 24,636,190 | 9,376,529        | 38,210,716     | 47,587,245 |
| 1913..... | 28,654            | 12,078,041 | 10,739         | 24,238,788 | 11,130,875       | 40,923,038     | 52,053,913 |
| 1914..... | 26,125            | 12,050,856 | 7,742          | 15,636,414 | 9,382,206        | 27,641,031     | 37,023,237 |

Reducing the foregoing figures in relation to freight tonnage to a percentage basis, the situation is further illuminated:—

| Year.     | Canadian Per Cent. | American Per Cent. |
|-----------|--------------------|--------------------|
| 1908..... | 28.7               | 71.3               |
| 1909..... | 21.8               | 78.2               |
| 1910..... | 18.3               | 81.7               |
| 1911..... | 20.5               | 79.5               |
| 1912..... | 19.7               | 80.3               |
| 1913..... | 21.3               | 78.7               |
| 1914..... | 25.3               | 74.7               |

All of the freight traffic of Canada did not, however, pass through Canadian canals. At Sault St. Marie, 1,068,812 tons of Canadian commerce passed through the American canal at that point. The facts in this regard for preceding years are not available, although an effort will be made during the current year to get them. Adding the 1,068,812 tons which passed through the American canal to the net tonnage of Canadian traffic for all canals as shown in a preceding paragraph—5,521,228—we have a total of 6,590,040 for 1914 is produced.



The situation at Sault Ste. Marie in 1914, having reference to both the Canadian and American canals at that point, might be summarized as follows: Out of a total traffic belonging to the United States of 50,692,092 tons, 23,989,437 tons, or 47·3 per cent. passed through the Canadian canal. On the other hand, out of an aggregate traffic of 4,678,559 tons belonging to Canada, 1,068,812 tons, or 22·8 per cent, passed through the American canal.

The year 1914, in this respect, reflected normal conditions.

The ratio of Canadian traffic was bettered in 1914 wholly because of the large decline in American business. Measured by volume, Canadian freight tonnage decreased in 1914 by 15·7 per cent. American freight tonnage decreased by 32·5 per cent. Tables 1 and 7, in the body of this report, will give a considerable mass of details respecting the international character of canal traffic; but, for the purposes of immediate comparison, the following summary will be found helpful:—

| Canals.               | Total Traffic. | Canadian Tons. | Per Cent. | American Tons. | Per Cent. |
|-----------------------|----------------|----------------|-----------|----------------|-----------|
| Sault Ste. Marie..... | 27,599,184     | 3,609,747      | 13·0      | 23,989,437     | 86·9      |
| Welland.....          | 3,860,969      | 2,013,619      | 52·1      | 1,847,350      | 47·6      |
| St. Lawrence.....     | 4,391,493      | 2,738,649      | 62·3      | 1,652,844      | 37·7      |
| Chambly.....          | 436,905        | 308,091        | 70·5      | 128,814        | 29·5      |
| St. Peters.....       | 54,180         | 54,164         | 99·9      | 16             |           |
| Murray.....           | 83,907         | 80,946         | 96·4      | 2,961          | 3·5       |
| Ottawa.....           | 335,132        | 325,059        | 96·9      | 10,073         | 6·0       |
| Rideau.....           | 151,739        | 142,203        | 93·7      | 9,536          | 6·3       |
| Trent.....            | 67,715         | 67,715         | 100·0     |                |           |
| St. Andrews.....      | 42,013         | 42,013         | 100·0     |                |           |
|                       | 37,023,237     | 9,382,206      | 25·3      | 27,641,031     | 74·7      |

It will be observed that the preponderance of American traffic, amounting to nearly 75 per cent of the total for all canals, arises very largely from the situation at Sault Ste. Marie, which is the chief gateway of commerce on the Great Lakes. At that point in 1914 the volume of freight tonnage belonging to the United States was equal to 86·9 per cent of the aggregate. The Canadian canal at Sault Ste. Marie was opened for traffic in 1895, and since that year the history of the freight movement through it is shown in the following table:—

| Year.     | Total Traffic. | Canadian Traffic. | Per cent Canadian. | American Traffic. | Per cent American. |
|-----------|----------------|-------------------|--------------------|-------------------|--------------------|
| 1896..... | 4,557,399      | 321,770           | 7·0                | 4,255,629         | 93·0               |
| 1897..... | 4,947,063      | 337,146           | 6·8                | 4,609,737         | 93·2               |
| 1898..... | 3,055,287      | 146,539           | 4·8                | 2,908,748         | 95·2               |
| 1899..... | 3,006,664      | 299,975           | 9·9                | 2,706,629         | 90·1               |
| 1900..... | 2,035,677      | 255,264           | 12·5               | 1,880,413         | 87·5               |
| 1901..... | 2,820,394      | 494,613           | 17·5               | 2,325,781         | 82·5               |
| 1902..... | 4,729,268      | 1,140,623         | 24·1               | 3,588,645         | 75·9               |
| 1903..... | 5,511,868      | 1,362,820         | 24·7               | 4,149,048         | 75·3               |
| 1904..... | 5,030,705      | 1,212,145         | 24·1               | 3,818,360         | 75·9               |
| 1905..... | 5,473,406      | 1,304,355         | 23·8               | 4,169,051         | 76·2               |
| 1906..... | 6,574,046      | 1,632,683         | 24·8               | 4,941,363         | 75·2               |
| 1907..... | 15,588,165     | 1,957,334         | 12·5               | 13,630,831        | 87·5               |
| 1908..... | 12,759,216     | 2,113,160         | 16·5               | 10,646,056        | 83·5               |
| 1909..... | 27,861,245     | 2,767,875         | 9·1                | 25,093,370        | 90·9               |
| 1910..... | 36,395,687     | 2,941,229         | 8·1                | 33,454,458        | 91·9               |
| 1911..... | 30,951,709     | 3,167,936         | 10·2               | 27,783,773        | 89·8               |
| 1912..... | 39,669,655     | 3,808,157         | 9·6                | 35,861,498        | 90·4               |
| 1913..... | 42,699,324     | 4,816,718         | 11·3               | 37,882,606        | 88·7               |
| 1914..... | 27,599,184     | 3,609,747         | 13·1               | 23,989,437        | 86·9               |



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The foregoing table will not be perfectly understood in the absence of facts respecting the character of American traffic through the Canadian canal at Sault Ste. Marie. When that traffic is analysed it is found to consist very largely of iron ore being moved eastward. This movement of ore on a large scale began in the nineties. The following table gives the facts since 1905:—

| Year.     | American Traffic through Canadian Canal. |            |            | Ore included in foregoing total. | Per cent of Ore. | Com-modities other than Ore. | Per cent of other Com-modities. |
|-----------|--|------------|------------|----------------------------------|------------------|------------------------------|---------------------------------|
|           | Up.                                      | Down.      | Total.     |                                  |                  |                              |                                 |
|           | Tons.                                    | Tons.      | Tons.      | Tons.                            |                  | Tons.                        |                                 |
| 1905..... | 1,028,871                                | 3,140,180  | 4,169,051  | 2,910,118                        | 69.9             | 1,258,933                    | 30.1                            |
| 1906..... | 1,367,796                                | 3,573,567  | 4,941,363  | 2,929,366                        | 59.3             | 1,011,997                    | 40.7                            |
| 1907..... | 2,604,741                                | 11,026,090 | 13,630,831 | 9,995,242                        | 73.2             | 3,635,589                    | 26.8                            |
| 1908..... | 2,419,709                                | 8,226,347  | 10,646,056 | 7,362,351                        | 69.1             | 3,283,705                    | 30.9                            |
| 1909..... | 2,737,101                                | 22,356,269 | 25,093,370 | 21,156,915                       | 84.3             | 3,936,455                    | 15.7                            |
| 1910..... | 4,004,538                                | 29,449,920 | 33,454,458 | 28,440,952                       | 85.0             | 5,013,506                    | 15.0                            |
| 1911..... | 4,307,187                                | 23,476,586 | 27,783,773 | 22,654,029                       | 81.5             | 5,129,744                    | 18.5                            |
| 1912..... | 3,133,638                                | 32,727,860 | 35,861,498 | 31,134,251                       | 87.0             | 4,727,247                    | 13.0                            |
| 1913..... | 4,238,829                                | 33,643,777 | 37,882,606 | 32,386,866                       | 85.5             | 5,495,740                    | 14.5                            |
| 1914..... | 2,398,944                                | 21,737,678 | 24,136,622 | 20,817,953                       | 86.2             | 3,318,669                    | 13.8                            |

The foregoing American total for 1914 includes 147,185 tons of Canadian wheat from Duluth, which, starting from a United States port, is, for the purposes of this table, counted as American.

The total of American traffic in the table above, it should be explained, does not agree closely with the figures in table 7, for the reason that Canadian grain shipped from Duluth is, for the purposes of the comparison in hand, classified as belonging to the business of the United States. The analysis of the situation at Sault Ste. Marie may be concluded by comparing the volume of Canadian and American eastbound traffic, exclusive of ore. A few cargoes of iron and copper ore of Canadian origin are carried annually eastward; but when ore is taken out of the account the facts remain as follows:—

| Year.     | Canadian Eastbound exclusive of ore. | Per cent of total Eastbound | American Eastbound exclusive of ore. | Per cent of total Eastbound |
|-----------|--------------------------------------|-----------------------------|--------------------------------------|-----------------------------|
| 1905..... | 838,537                              | 82.7                        | 303,630                              | 9.7                         |
| 1906..... | 1,112,742                            | 92.8                        | 721,320                              | 20.2                        |
| 1907..... | 1,446,788                            | 91.7                        | 1,142,468                            | 10.3                        |
| 1908..... | 1,585,549                            | 92.3                        | 986,614                              | 11.9                        |
| 1909..... | 2,038,245                            | 98.0                        | 1,229,282                            | 5.5                         |
| 1910..... | 2,132,620                            | 100.0                       | 962,062                              | 3.3                         |
| 1911..... | 2,466,806                            | 99.1                        | 820,488                              | 3.5                         |
| 1912..... | 3,019,998                            | 99.8                        | 1,576,646                            | 4.8                         |
| 1913..... | 4,114,402                            | 99.0                        | 1,271,882                            | 3.8                         |
| 1914..... | 2,985,114                            | 97.1                        | 919,725                              | 4.2                         |



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At the Welland canal, iron ore is not a factor. The traffic is of a general character. The Welland is the principal gateway between Sault Ste. Marie and Montreal, and it will help to a clearer understanding of the canal situation if the facts with respect to traffic at that point are given. They are as follows:—

TRAFFIC THROUGH THE WELLAND CANAL.

| Year.     | Canadian—<br><i>Up.</i> | Per<br>cent. | Canadian—<br><i>Down.</i> | Per<br>cent. | United<br>States—<br><i>Up.</i> | Per<br>cent. | United<br>States—<br><i>Down.</i> | Per<br>cent. |
|-----------|-------------------------|--------------|---------------------------|--------------|---------------------------------|--------------|-----------------------------------|--------------|
|           | Tons.                   |              | Tons.                     |              | Tons.                           |              | Tons.                             |              |
| 1887..... | 61,310                  | 41.3         | 87,159                    | 58.7         | 265,738                         | 31.9         | 565,928                           | 68.1         |
| 1891..... | 25,260                  | 25.8         | 72,522                    | 74.2         | 264,952                         | 30.2         | 612,279                           | 69.8         |
| 1896..... | 19,369                  | 8.8          | 200,294                   | 91.2         | 271,900                         | 25.6         | 788,424                           | 74.4         |
| 1897..... | 12,091                  | 6.3          | 179,998                   | 93.7         | 212,108                         | 19.6         | 870,095                           | 80.4         |
| 1898..... | 11,904                  | 8.5          | 127,236                   | 91.5         | 211,502                         | 21.1         | 789,435                           | 78.9         |
| 1899..... | 17,464                  | 10.2         | 153,174                   | 89.8         | 135,038                         | 21.8         | 484,094                           | 78.2         |
| 1900..... | 18,670                  | 11.0         | 150,378                   | 89.0         | 99,560                          | 18.1         | 450,752                           | 81.9         |
| 1901..... | 22,804                  | 10.2         | 200,693                   | 89.8         | 83,601                          | 21.1         | 313,111                           | 78.9         |
| 1902..... | 39,760                  | 16.2         | 204,398                   | 83.8         | 44,994                          | 10.7         | 376,235                           | 89.3         |
| 1903..... | 116,143                 | 34.6         | 220,152                   | 65.4         | 153,947                         | 23.1         | 512,677                           | 76.9         |
| 1904..... | 94,353                  | 27.1         | 253,920                   | 72.9         | 90,855                          | 19.6         | 372,243                           | 80.4         |
| 1905..... | 104,490                 | 24.6         | 319,944                   | 75.4         | 127,569                         | 19.1         | 540,047                           | 80.9         |
| 1906..... | 131,502                 | 24.2         | 410,749                   | 75.8         | 91,366                          | 13.8         | 568,350                           | 86.2         |
| 1907..... | 202,051                 | 29.6         | 479,292                   | 70.4         | 188,113                         | 20.1         | 744,676                           | 79.9         |
| 1908..... | 163,447                 | 21.7         | 587,239                   | 78.3         | 247,513                         | 25.9         | 705,254                           | 74.1         |
| 1909..... | 382,041                 | 37.5         | 635,187                   | 62.5         | 260,048                         | 25.7         | 748,675                           | 74.3         |
| 1910..... | 420,407                 | 35.9         | 749,891                   | 64.1         | 304,427                         | 26.3         | 851,565                           | 73.7         |
| 1911..... | 508,865                 | 38.0         | 828,085                   | 62.0         | 334,054                         | 27.8         | 866,625                           | 72.2         |
| 1912..... | 578,251                 | 37.1         | 979,525                   | 62.9         | 247,471                         | 19.1         | 1,046,668                         | 80.9         |
| 1913..... | 641,402                 | 32.4         | 1,338,274                 | 67.6         | 363,701                         | 22.9         | 1,227,337                         | 77.1         |
| 1914..... | 504,487                 | 22.2         | 1,769,502                 | 77.8         | 351,562                         | 22.2         | 1,235,418                         | 77.8         |

TRANSPORTATION OF CANADIAN WHEAT.

For several years special study has been given to the movement of Canadian wheat by water, and for this purpose the facts have been ascertained and tabulated in relation to both distribution and freight rates. The information developed in this way will have an increasing value as time proceeds.

The records of the Department show that the shipments each year through the Canadian canal at Sault Ste. Marie, since 1895, have been as follows:—

|           |             |
|-----------|-------------|
|           | Bushels.    |
| 1895..... | 1,087,800   |
| 1896..... | 7,274,000   |
| 1897..... | 9,130,167   |
| 1898..... | 3,456,934   |
| 1899..... | 7,699,267   |
| 1900..... | 5,573,267   |
| 1901..... | 5,893,034   |
| 1902..... | 19,896,900  |
| 1903..... | 25,807,800  |
| 1904..... | 25,250,969  |
| 1905..... | 22,603,500  |
| 1906..... | 26,361,400  |
| 1907..... | 34,602,000  |
| 1908..... | 41,793,300  |
| 1909..... | 48,047,833  |
| 1910..... | 51,774,833  |
| 1911..... | 63,641,000  |
| 1912..... | 83,743,034  |
| 1913..... | 101,066,133 |
| 1914..... | 77,467,833  |

It should be clearly understood that prior to 1909 the figures do not include shipments of Canadian wheat in bond from Duluth which passed through the



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Canadian canal. It must also be borne in mind that consignments which passed through the American canal are, in all years, excluded. In other words, the foregoing table relates to waterborne wheat which passed through the Canadian canal at Sault Ste. Marie, and includes shipments from Duluth only in 1909 and succeeding years.

Canadian wheat, as has been explained, also passed through the American canal at Sault Ste. Marie. The following summary gives the facts for 1914:—

|                                 |            |
|---------------------------------|------------|
|                                 | Bushels.   |
| Through the Canadian canal..... | 77,467,833 |
| Through the American canal..... | 17,564,233 |
| Total.....                      | 95,032,066 |

Shipments of Canadian flour from the west had a total of 3,275,532 barrels, of which 1,975,950 passed through the Canadian canal and 1,499,370 passed through the American canal at Sault Ste. Marie. At 4½ bushels to the barrel, the volume of flour would be equal to 14,739,872 bushels of wheat. This wheat in the form of flour showed an increase of 7,161,107 bushels over 1913. Joining wheat and flour shipments through both canals, the final total is 106,442,605 bushels, which was 42,867,059 bushels below the record for the preceding year. Summarized, the movement of wheat in 1914 was as follows:

|                                 |             |
|---------------------------------|-------------|
|                                 | Bushels.    |
| Through the Canadian canal..... | 77,467,833  |
| Through the American canal..... | 17,564,233  |
| In the form of flour.....       | 14,739,872  |
| Total.....                      | 109,771,938 |

Combining shipments of Canadian wheat through the Canadian and American canals at Sault Ste. Marie since a special account was kept of the facts, following is the result:—

|           |             |
|-----------|-------------|
|           | Bushels.    |
| 1912..... | 109,842,031 |
| 1913..... | 141,726,899 |
| 1914..... | 95,032,066  |

Special care has been taken during recent years to follow the distribution of waterborne wheat of Canadian origin. For the years 1913 and 1914 the volume which came down from Port Arthur–Fort William and passed through both the Canadian and American canals at Sault Ste. Marie took the following routes:—

| From                        | 1913        | 1914       |
|-----------------------------|-------------|------------|
| Port Arthur–Fort William.   | Bushels.    | Bushels.   |
| To Montreal.....            | 11,950,433  | 9,624,600  |
| “ Georgian Bay ports.....   | 24,448,134  | 21,086,566 |
| “ other Canadian ports..... | 28,045,733  | 33,132,733 |
| “ Buffalo.....              | 67,701,900  | 24,974,767 |
| Total.....                  | 132,146,200 | 88,818,666 |

In order to account for all the Canadian wheat which actually moved eastbound in 1913 and 1914, through both the Canadian and American canals



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at Sault Ste. Marie, it is necessary to add to the foregoing the cargoes which came out in bond from Duluth. Joining the Port Arthur-Fort William shipments to those from Duluth, the following final quantities and distribution are had:—

| From                                 | 1913        | Per cent. | 1914       | Per cent. |
|--------------------------------------|-------------|-----------|------------|-----------|
| Port Arthur-Fort William and Duluth. | Bushels.    |           | Bushels.   |           |
| To Montreal.....                     | 15,186,632  | 10·7      | 10,283,166 | 10·8      |
| “ Georgian Bay ports.....            | 26,054,001  | 18·4      | 24,864,466 | 26·2      |
| “ other Canadian ports.....          | 28,973,333  | 20·5      | 34,350,700 | 36·2      |
| “ Buffalo.....                       | 71,522,933  | 50·4      | 25,533,734 | 26·8      |
| Total.....                           | 141,726,899 | .....     | 95,032,066 | .....     |

It should be explained that “other Canadian ports” in the foregoing tables are ports lying between the Georgian bay and lake Ontario. For the most part the term means Port Colborne, which, as will be made plain later, is a port of transfer.

In order that a basis for comparison may be preserved, having regard to preceding reports, the following summary of the movement of Canadian wheat through the Canadian and American canals at Sault Ste. Marie is given:—

| Canadian Wheat.          | 1909.      | 1910.      | 1911.      | 1912.       | 1913.       | 1914.      |
|--------------------------|------------|------------|------------|-------------|-------------|------------|
|                          | Bushels.   | Bushels.   | Bushels.   | Bushels.    | Bushels.    | Bushels.   |
| Fort William to—         |            |            |            |             |             |            |
| Montreal.....            | 10,517,266 | 13,185,370 | 12,761,666 | 14,929,099  | 11,950,433  | 9,624,600  |
| Georgian bay.....        | 13,384,400 | 12,753,200 | 9,881,234  | 19,501,168  | 24,448,134  | 21,086,566 |
| Other Canadian ports.... | 10,149,633 | 9,603,400  | 11,880,666 | 20,458,700  | 28,045,733  | 33,132,733 |
| Buffalo.....             | 12,841,334 | 15,693,363 | 27,945,600 | 44,228,266  | 67,701,900  | 24,974,767 |
| Duluth to—               |            |            |            |             |             |            |
| Montreal.....            | 520,000    | 315,000    |            | 283,500     | 3,236,199   | 658,566    |
| Buffalo.....             | 528,200    | 224,500    | 710,334    | 5,714,367   | 3,811,033   | 3,777,900  |
| Georgian bay.....        | 28,000     |            | 461,500    | 1,418,767   | 1,605,867   | 1,217,967  |
| Other Canadian ports.... | 79,000     |            |            | 230,000     | 927,600     | 558,967    |
| Unclassified.....        |            |            |            | 3,078,164   |             |            |
| Total.....               | 48,047,833 | 51,774,833 | 63,641,000 | 109,842,031 | 141,726,899 | 95,032,066 |
| Through American canal.  | 9,117,328  | 5,321,446  | 1,981,481  |             |             |            |
| Grand total ...          | 57,165,161 | 57,096,279 | 65,622,481 | 109,842,031 | 141,726,899 | 95,032,066 |



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In a preceding table the volume and percentage of Canadian wheat which took the various routes of distribution in 1914 are given. The following table shows in convenient form the percentages for prior years:—

| Canadian Wheat.               | 1909.     | 1910.     | 1911.     | 1912.     | 1913.     |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|
|                               | Per cent. | Per cent. | Per cent. | Per cent. | Per cent. |
| Fort William to Montreal..... | 21.9      | 25.5      | 20.1      | 13.6      | 8.4       |
| “ “ Georgian bay.....         | 27.9      | 24.6      | 15.6      | 17.8      | 17.2      |
| “ “ other Canadian ports....  | 21.1      | 18.5      | 18.7      | 18.6      | 19.8      |
| “ “ Buffalo.....              | 26.7      | 30.3      | 43.8      | 40.2      | 47.8      |
| Duluth to Canadian ports..... | 1.3       | 0.6       | 0.7       | 1.7       | 4.1       |
| “ “ American ports.....       | 1.1       | 0.5       | 1.1       | 5.2       | 2.7       |
| “ “ unclassified.....         |           |           |           | 2.9       |           |

The causes of the diversion of Canadian wheat to Buffalo have been dealt with in preceding reports. It is perhaps significant of a change in conditions that in 1914 only 26.8 per cent of Canadian wheat sought an outlet through American channels, as compared with 50.4 per cent in 1913. The war in Europe was probably a potential factor in the matter during the autumn months.

During the year 1914 a special study was made of the movement of Canadian wheat by months as well as by routes of distribution. The facts thus gathered and tabulated will undoubtedly throw a helpful light on the whole situation. The following statements show the volume which passed through the Canadian and American canals in 1913:—

| Canadian Canal.               | April.    | May.       | June.     | July.     | August.   |
|-------------------------------|-----------|------------|-----------|-----------|-----------|
| 1913.                         | Bushels.  | Bushels.   | Bushels.  | Bushels.  | Bushels.  |
| Fort William to Montreal..... | 634,600   | 1,973,900  | 1,782,667 | 1,407,733 | 1,097,900 |
| “ “ Georgian bay.....         | 1,477,000 | 2,619,967  | 930,833   | 1,080,500 | 441,100   |
| “ “ other Canadian ports....  | 1,282,300 | 2,545,700  | 3,056,066 | 2,536,300 | 1,628,400 |
| “ “ Buffalo.....              | 1,430,633 | 2,039,600  | 197,000   |           |           |
| Duluth to Montreal.....       |           | 24,000     |           | 22,533    | 187,000   |
| “ “ Georgian bay.....         | 330,000   | 86,066     |           |           |           |
| “ “ other Canadian ports..... |           | 77,600     |           |           |           |
| “ “ Buffalo.....              | 534,000   | 817,867    | 330,000   | 274,300   |           |
| Total.....                    | 5,688,533 | 10,184,700 | 6,296,566 | 5,321,366 | 3,354,400 |

| Canadian Canal.               | September. | October.   | November.  | December.  | Total.      |
|-------------------------------|------------|------------|------------|------------|-------------|
| 1913.                         | Bushels.   | Bushels.   | Bushels.   | Bushels.   | Bushels.    |
| Fort William to Montreal..... | 1,512,500  | 1,697,567  | 1,052,900  | 73,367     | 11,233,134  |
| “ “ Georgian bay.....         | 589,533    | 5,988,400  | 6,455,400  | 1,949,400  | 21,532,133  |
| “ “ other Canadian ports....  | 1,908,600  | 6,421,233  | 4,437,900  | 1,763,500  | 25,579,999  |
| “ “ Buffalo.....              | 2,250,633  | 12,058,366 | 13,987,133 | 7,319,133  | 39,282,498  |
| Duluth to Montreal.....       | 204,000    |            |            |            | 437,533     |
| “ “ Georgian bay.....         |            |            |            |            | 416,066     |
| “ “ other Canadian ports..... | 204,000    |            |            |            | 281,600     |
| “ “ Buffalo.....              |            | 347,000    |            |            | 2,303,167   |
| Total.....                    | 6,669,266  | 26,512,566 | 25,933,333 | 11,105,400 | 101,066,130 |



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| American Canal.               | April.    | May.      | June.     | July.    | August.  |
|-------------------------------|-----------|-----------|-----------|----------|----------|
| 1913.                         | Bushels.  | Bushels.  | Bushels.  | Bushels. | Bushels. |
| Fort William to Montreal..... |           | 245,000   | 63,000    |          |          |
| “ “ Georgian Bay ports.....   | 948,263   | 321,169   | 202,000   | 89,465   | 91,476   |
| “ “ other Canadian ports....  | 330,500   | 355,788   | 214,000   | 116,000  | 220,000  |
| “ “ Buffalo.....              | 5,582,351 | 3,820,335 | 1,009,130 | 486,862  |          |
| Duluth to Montreal.....       | 202,500   | 404,753   | 239,403   | 52,507   |          |
| “ “ Georgian Bay ports.....   |           |           |           |          |          |
| “ “ other Canadian ports..... |           |           | 109,000   |          |          |
| “ “ Buffalo.....              | 214,610   | 1,158,011 | 264,948   | 77,134   |          |
| Total.....                    | 7,278,224 | 6,305,056 | 2,101,481 | 821,968  | 311,476  |

| American Canal.               | September. | October.  | November. | December. | Total.     |
|-------------------------------|------------|-----------|-----------|-----------|------------|
| 1913.                         | Bushels.   | Bushels.  | Bushels.  | Bushels.  | Bushels.   |
| Fort William to Montreal..... | 72,000     | 337,300   |           |           | 717,300    |
| “ “ Georgian Bay ports.....   | 92,231     | 318,932   | 352,500   |           | 2,416,036  |
| “ “ other Canadian ports....  | 638,440    | 448,000   | 143,000   |           | 2,465,728  |
| “ “ Buffalo.....              | 1,896,794  | 7,323,130 | 5,719,724 | 2,770,277 | 28,608,603 |
| Duluth to Montreal.....       | 229,500    | 504,455   | 204,500   |           | 1,837,618  |
| “ “ Georgian Bay ports.....   |            | 61,000    | 185,000   |           | 246,000    |
| “ “ other Canadian ports..... |            |           |           |           | 109,000    |
| “ “ Buffalo.....              | 100,700    | 178,000   |           |           | 1,993,403  |
| Total.....                    | 3,029,665  | 9,170,817 | 6,604,724 | 2,770,277 | 38,393,688 |

It will be observed that there is a difference of 2,267,078 between the total shown in the above table and the total for 1913 in a preceding table. This arose from a difficulty in identifying the cargoes as shown in the American reports for the purposes of the foregoing analysis. All cargoes which could not be classified by months were left out; but these omissions do not destroy the value of the comparison as between 1913 and 1914.

Joining the figures for the Canadian and American canals for 1913, following is the result:—

| Canadian and American Canals.    | April.     | May.       | June.     | July.     | August.   |
|----------------------------------|------------|------------|-----------|-----------|-----------|
| 1913.                            | Bushels.   | Bushels.   | Bushels.  | Bushels.  | Bushels.  |
| Fort William and Port Arthur to— |            |            |           |           |           |
| Montreal.....                    | 634,600    | 2,218,900  | 1,845,667 | 1,407,733 | 1,097,900 |
| Georgian bay. ....               | 2,425,263  | 2,941,136  | 1,132,833 | 1,169,965 | 532,576   |
| Other Canadian ports.....        | 1,612,800  | 2,901,488  | 3,270,066 | 2,652,300 | 1,848,400 |
| Buffalo.....                     | 7,012,984  | 5,859,935  | 1,206,130 | 486,862   |           |
| Duluth and Superior to—          |            |            |           |           |           |
| Montreal.....                    | 202,500    | 428,753    | 239,403   | 75,040    | 187,000   |
| Georgian bay.....                | 330,000    | 86,066     |           |           |           |
| Other Canadian ports.....        |            | 77,600     | 109,000   |           |           |
| Buffalo.....                     | 748,610    | 1,975,878  | 594,948   | 351,434   |           |
| Total.....                       | 12,966,757 | 16,489,756 | 8,398,047 | 6,143,334 | 3,665,876 |



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| Canadian and American Canals.    | September. | October.   | November.  | December.  | Total.      |
|----------------------------------|------------|------------|------------|------------|-------------|
| 1913.                            | Bushels.   | Bushels.   | Bushels.   | Bushels.   | Bushels.    |
| Fort William and Port Arthur to— |            |            |            |            |             |
| Montreal.....                    | 1,584,500  | 2,034,867  | 1,052,900  | 73,367     | 11,950,434  |
| Georgian bay.....                | 681,764    | 6,307,332  | 6,807,900  | 1,949,400  | 23,948,169  |
| Other Canadian ports.....        | 2,547,040  | 6,869,233  | 4,580,900  | 1,763,500  | 28,045,727  |
| Buffalo.....                     | 4,147,427  | 19,381,496 | 19,706,857 | 10,089,410 | 67,891,101  |
| Duluth and Superior to—          |            |            |            |            |             |
| Montreal.....                    | 433,500    | 504,455    | 204,500    |            | 2,275,151   |
| Georgian bay.....                |            | 61,000     | 185,000    |            | 662,066     |
| Other Canadian ports.....        | 204,000    |            |            |            | 390,600     |
| Buffalo.....                     | 100,700    | 525,000    |            |            | 4,296,570   |
| Total.....                       | 9,698,931  | 35,683,383 | 32,538,057 | 13,875,677 | 139,459,818 |

The movement of Canadian wheat, by months, in 1914, through (1) the Canadian canal, (2) the American canal, and (3) the total of both canals, is shown in the three following tables:—

| Canadian Canal.               | April.    | May.       | June.     | July      | August.   |
|-------------------------------|-----------|------------|-----------|-----------|-----------|
| 1914.                         | Bushels.  | Bushels.   | Bushels.  | Bushels.  | Bushels.  |
| Fort William to Montreal..... | 1,070,000 | 2,006,733  | 1,329,067 | 1,235,334 | 474,933   |
| “ “ Georgian bay.....         | 778,300   | 3,328,667  | 668,567   | 1,087,700 | 206,100   |
| “ “ other Canadian ports....  | 924,000   | 4,466,700  | 3,417,600 | 2,730,200 | 1,074,000 |
| “ “ Buffalo.....              | 2,774,600 | 4,115,467  | 844,267   | 705,433   | 53,333    |
| Duluth to Montreal.....       |           |            |           | 107,000   |           |
| “ “ Georgian bay.....         | 355,833   | 2,098,067  | 326,000   | 117,000   |           |
| “ “ other Canadian ports..... |           |            | 744,000   |           |           |
| “ “ Buffalo.....              |           |            |           |           |           |
| Total.....                    | 5,902,733 | 16,015,634 | 7,329,501 | 5,982,667 | 1,808,366 |

| Canadian Canal.               | September. | October.   | November.  | December. | Total.     |
|-------------------------------|------------|------------|------------|-----------|------------|
| 1914.                         | Bushels.   | Bushels.   | Bushels.   | Bushels.  | Bushels.   |
| Fort William to Montreal..... | 1,229,700  | 1,075,800  | 833,533    | 60,000    | 9,315,100  |
| “ “ Georgian bay.....         | 990,967    | 2,533,166  | 6,494,166  | 2,604,500 | 18,692,133 |
| “ “ other Canadian ports....  | 5,711,666  | 8,006,000  | 3,218,200  | 965,634   | 30,514,000 |
| “ “ Buffalo.....              | 1,858,400  | 1,876,800  | 1,798,400  | 224,000   | 14,250,700 |
| Duluth to Montreal.....       |            |            |            |           | 107,000    |
| “ “ Georgian bay.....         | 881,000    |            |            |           | 3,777,900  |
| “ “ other Canadian ports..... |            | 67,000     |            |           | 811,000    |
| “ “ Buffalo.....              |            |            |            |           |            |
| Total.....                    | 10,671,733 | 13,558,766 | 12,344,299 | 3,854,134 | 77,467,833 |



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| American Canal.               | April.   | May.      | June.    | July.     | August.  |
|-------------------------------|----------|-----------|----------|-----------|----------|
| 1914.                         | Bushels. | Bushels.  | Bushels. | Bushels.  | Bushels. |
| Fort William to Montreal..... | 105,000  | 68,000    |          |           |          |
| “ “ Georgian bay.....         |          | 76,466    | 170,766  | 105,833   | 165,500  |
| “ “ other Canadian ports....  |          | 936,533   |          |           | 137,000  |
| “ “ Buffalo.....              | 59,500   | 1,434,234 |          | 445,000   | 240,000  |
| Duluth to Montreal.....       |          | 78,000    |          |           |          |
| “ “ Georgian bay.....         |          |           |          | 128,100   | 48,867   |
| “ “ other Canadian ports..... |          |           | 41,567   | 393,400   |          |
| “ “ Buffalo.....              |          |           |          |           |          |
| Total.....                    | 164,500  | 2,593,233 | 212,333  | 1,072,333 | 591,367  |

| American Canal.               | September. | October.  | November. | December. | Total.     |
|-------------------------------|------------|-----------|-----------|-----------|------------|
| 1914.                         | Bushels.   | Bushels.  | Bushels.  | Bushels.  | Bushels.   |
| Fort William to Montreal..... |            | 136,500   |           |           | 389,500    |
| “ “ Georgian bay.....         | 345,267    | 358,334   | 1,147,934 | 25,000    | 2,305,100  |
| “ “ other Canadian ports....  | 696,200    | 849,000   |           |           | 2,618,733  |
| “ “ Buffalo.....              | 922,066    | 3,106,800 | 3,011,967 | 1,504,500 | 10,724,067 |
| Duluth to Montreal.....       | 353,000    | 71,500    | 49,066    |           | 551,566    |
| “ “ Georgian bay.....         |            |           |           |           |            |
| “ “ other Canadian ports..... | 99,000     | 131,000   |           |           | 406,967    |
| “ “ Buffalo.....              |            | 48,200    | 46,300    | 29,500    | 558,967    |
| Total.....                    | 2,415,533  | 4,701,334 | 4,255,267 | 1,559,000 | 17,564,900 |

| Canadian and American Canals. | April.    | May.       | June.     | July.     | August.   |
|-------------------------------|-----------|------------|-----------|-----------|-----------|
| 1914.                         | Bushels.  | Bushels.   | Bushels.  | Bushels.  | Bushels.  |
| Fort William to Montreal..... | 1,175,000 | 2,074,733  | 1,329,067 | 1,235,334 | 474,933   |
| “ “ Georgian bay.....         | 778,300   | 3,405,133  | 839,334   | 1,193,533 | 371,600   |
| “ “ other Canadian ports..    | 924,000   | 5,403,233  | 3,417,600 | 2,730,200 | 1,211,000 |
| “ “ Buffalo.....              | 2,834,100 | 5,549,700  | 844,266   | 1,150,433 | 293,334   |
| Duluth to Montreal.....       |           | 78,000     |           | 107,000   |           |
| “ “ Georgian bay.....         | 355,833   | 2,098,067  | 326,000   | 117,000   |           |
| “ “ other Canadian ports..... |           |            | 744,000   | 128,100   | 48,866    |
| “ “ Buffalo.....              |           |            | 41,567    | 393,400   |           |
| Total.....                    | 6,067,233 | 18,608,866 | 7,541,834 | 7,055,000 | 2,399,733 |

| Canadian and American Canals. | September. | October.   | November.  | December. | Total.     |
|-------------------------------|------------|------------|------------|-----------|------------|
| 1914.                         | Bushels.   | Bushels.   | Bushels.   | Bushels.  | Bushels.   |
| Fort William to Montreal..... | 1,229,700  | 1,212,300  | 833,533    | 60,000    | 9,624,600  |
| “ “ Georgian bay.....         | 1,335,567  | 2,891,500  | 7,642,100  | 2,629,500 | 21,086,567 |
| “ “ other Canadian ports..    | 6,407,866  | 8,855,000  | 3,218,200  | 965,634   | 33,132,733 |
| “ “ Buffalo.....              | 2,780,467  | 4,983,600  | 4,810,367  | 1,728,500 | 24,974,767 |
| Duluth to Montreal.....       | 353,000    | 71,500     | 49,066     |           | 658,566    |
| “ “ Georgian bay.....         | 881,000    |            |            |           | 3,777,900  |
| “ “ other Canadian ports..... | 99,000     | 198,000    |            |           | 1,217,966  |
| “ “ Buffalo.....              |            | 48,200     | 46,300     | 29,500    | 558,967    |
| Total.....                    | 13,086,600 | 18,260,100 | 16,599,566 | 5,413,134 | 95,032,066 |



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It will be observed that there were wide fluctuations in the monthly shipments as between 1913 and 1914. In May, July, and September, 1914, the movement was larger than for the corresponding months of 1913; but in the three last months of 1914 the falling-off, as compared with 1913, was strikingly heavy. Altogether it amounted to 41,824,317 bushels. Another salient feature of this comparison is that, while nearly 60 per cent of the total shipments took place in 1913 during the three last months of the year, in 1914 only 42 per cent occurred during those months. This result may have been caused by a lower yield in the west, coupled with the influence of the war in Europe.

Perhaps more significant still was the change in the destination of cargoes. In 1913 a preponderance of the Canadian wheat moved found an outlet by way of Buffalo. In 1913 Canadian channels carried the bulk of the shipments. In such a result is seen the force of the chief factor in creating the diversion to Buffalo—pressure. When the movement is heavy, cargoes seek the shortest and quickest route to foreign markets.

## FREIGHT RATES BY WATER.

The study of freight rates by water was continued in 1914; but it was limited in its application to Canadian wheat. The movement of wheat by water takes place wholly through channels which are connected by canals, and for that reason is brought under some measure of statistical control. A very considerable volume of other commodities is moved on the Great Lakes, rivers, and other bodies of inland water in Canada, without passing through one of these gateways. Pending legislation which would bring all carriers by water definitely under the control of the Department of Railways and Canals for statistical purposes, it was deemed inexpedient to continue the accumulation of only a part of the facts with respect to freight rates. Insufficient data, it was feared, might create misleading deductions.

The inquiry into the freight rates on waterborne wheat moved from the head of Lake Superior to points eastward in 1914 was carried out with a great deal of care. Although it was largely voluntary with carriers as to whether or not they gave their rates, there was not a single instance of refusal. This was probably due in some degree to the sympathetic attitude of the Dominion Marine Association toward the work of the Department in this connection. As a result of this hearty co-operation, the rates of freight were secured on practically all cargoes; so that the accuracy of the figures given may be accepted without question. They are, at all events, the only facts obtainable under present conditions. They emphasize, however, very strikingly the great need for other data in relation to the marine interests of the Dominion. Not until carriers by water are on the same reporting basis as railways will the situation be satisfactory.

In tables on preceding pages, the facts with regard to the volume of Canadian wheat moved over the various routes by months have been given. Having regard strictly to the freight rates, the averages for 1913 and 1914 were as follow:—

|   | 1913.      | 1914.      |
|---|------------|------------|
| Port Arthur—Fort William to Montreal—     |            |            |
| Per ton per mile.....                     | .142 cent. | .124 cent. |
| Per bushel.....                           | 5.351 “    | 4.58 “     |
| Per ton.....                              | \$1.78     | \$1.52     |
| Port Arthur—Fort William to Georgian Bay— |            |            |
| Per ton per mile.....                     | .148 cent. | .095 cent. |
| Per bushel.....                           | 2.279 “    | 1.46 “     |
| Per ton.....                              | 76.00 “    | 48.61 “    |



|   |            |            |  |
|---|------------|------------|--|
| Port Arthur—Fort William to other Canadian ports— |            |            |  |
| Per ton per mile.....                             | .104 cent. | .065 cent. |  |
| Per bushel.....                                   | 2.436 "    | 1.48 "     |  |
| Per ton.....                                      | 81.21 "    | 49.29 "    |  |
| Port Arthur—Fort William to Buffalo—              |            |            |  |
| Per ton per mile.....                             | .103 cent. | .061 cent. |  |
| Per bushel.....                                   | 2.430 "    | 1.63 "     |  |
| Per ton.....                                      | 81.00 "    | 53.72 "    |  |
| Port Arthur—Fort William to Kingston—             |            |            |  |
| Per ton per mile.....                             |            | .096 cent. |  |
| Per bushel.....                                   |            | 3.08 "     |  |
| Per ton.....                                      |            | \$1.00     |  |

The average freight rates, it will be seen, were lower in 1914 than in 1913. A feature of the figures each year is the close correspondence between the rates to other Canadian ports—which practically means Port Colborne—and Georgian Bay ports, although the difference in distance is considerable. The distance between Fort William and Port McNichol, a typical Georgian Bay port, is 514 miles, while to Port Colborne it is 851 miles. The addition of 337 miles to the voyage is not reflected in the freight rate. Very frequently during the season of navigation the rates to these points are identical, and in that fact is to be seen the operation of a law which always must be taken into account in considering freight rates by water. Competition eliminates material differences in distance.

Following was the record of freight rates, by months and by routes of distribution, in 1913 and 1914:—

| Port Arthur - Fort William to Montreal. | 1913.       |          |                   | 1914.       |          |               |
|---|-------------|----------|-------------------|-------------|----------|---------------|
|   | Per bushel. | Per ton. | Per ton per mile. | Per bushel. | Per ton. | Per per mile. |
|   | Cents.      | \$       | Cents.            | Cents.      | \$       | Cents.        |
| April.....                              | 6.015       | 2.04     | .165              | 5.52        | 1.84     | .149          |
| May.....                                | 5.525       | 1.84     | .135              | 5.01        | 1.67     | .136          |
| June.....                               | 4.682       | 1.54     | .127              | 4.17        | 1.39     | .113          |
| July.....                               | 4.080       | 1.60     | .130              | 4.02        | 1.34     | .107          |
| August.....                             | 5.440       | 1.68     | .137              | 4.47        | 1.49     | .121          |
| September.....                          | 5.282       | 1.76     | .144              | 4.53        | 1.51     | .123          |
| October.....                            | 6.313       | 2.10     | .171              | 4.31        | 1.43     | .116          |
| November.....                           | 6.341       | 2.11     | .172              | 4.30        | 1.40     | .114          |
| Average.....                            | 5.351       | 1.78     | .142              | 4.58        | 1.52     | .124          |



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| Port Arthur-Fort William to Georgian Bay. | 1913.       |          |                   | 1914.       |          |                   |
|---|-------------|----------|-------------------|-------------|----------|-------------------|
|   | Per bushel. | Per ton. | Per ton per mile. | Per bushel. | Per ton. | Per ton per mile. |
|   | Cents.      | Cents.   | Cents.            | Cents.      | Cents.   | Cents.            |
| April.....                                | 2.42        | 80.63    | .157              | 1.82        | 60.72    | .118              |
| May.....                                  | 2.16        | 71.85    | .135              | 1.45        | 48.66    | .095              |
| June.....                                 | 2.18        | 73.93    | .142              | 1.11        | 37.02    | .070              |
| July.....                                 | 1.59        | 52.73    | .102              | .90         | 30.20    | .058              |
| August.....                               | 1.43        | 47.81    | .092              | 1.04        | 35.12    | .068              |
| September.....                            | 1.53        | 51.26    | .100              | 1.23        | 41.23    | .080              |
| October.....                              | 2.21        | 73.95    | .146              | 1.26        | 42.26    | .082              |
| November.....                             | 2.46        | 82.30    | .160              | 1.35        | 45.01    | .087              |
| December.....                             | 3.35        | \$1.12   | .220              | 2.20        | 73.37    | .143              |
| Average.....                              | 2.28        | 76.03    | .148              | 1.46        | 48.61    | .095              |

| Port Arthur-Fort William to other Canadian ports. | 1913.       |          |                   | 1914.       |          |                   |
|---|-------------|----------|-------------------|-------------|----------|-------------------|
|   | Per bushel. | Per ton. | Per ton per mile. | Per bushel. | Per ton. | Per ton per mile. |
|   | Cents.      | Cents.   | Cents.            | Cents.      | Cents.   | Cents.            |
| April.....  | 2.599       | 86.63    | .127              | 1.75        | 58.46    | .075              |
| May.....  | 2.200       | 73.35    | .091              | 1.60        | 53.43    | .067              |
| June.....   | 1.755       | 58.53    | .072              | 1.41        | 47.19    | .064              |
| July.....   | 2.371       | 90.36    | .122              | 1.35        | 45.12    | .056              |
| August.....                                       | 1.928       | 64.27    | .082              | 1.05        | 35.30    | .060              |
| September.....                                    | 1.969       | 65.63    | .083              | 1.34        | 44.90    | .060              |
| October.....                                      | 2.767       | 92.23    | .166              | 1.40        | 49.51    | .062              |
| November.....                                     | 2.780       | 92.69    | .116              | 1.52        | 50.75    | .071              |
| December.....                                     | 3.081       | \$1.03   | .146              | 2.24        | 72.22    | .102              |
| Average.....                                      | 2.436       | 84.25    | .104              | 1.48        | 49.29    | .....             |

| Port Arthur-Fort William to Buffalo. | 1913.       |          |                   | 1914.       |          |                   |
|--------------------------------------|-------------|----------|-------------------|-------------|----------|-------------------|
|                                      | Per bushel. | Per ton. | Per ton per mile. | Per bushel. | Per ton. | Per ton per mile. |
|                                      | Cents.      | Cents.   | Cents.            | Cents.      | Cents.   | Cents.            |
| April.....                           | 2.739       | 91.30    | .108              | 2.79        | 91.94    | .105              |
| May.....                             | 2.442       | 81.40    | .094              | 1.26        | 42.21    | .048              |
| June.....                            | 1.954       | 65.13    | .076              | 1.41        | 36.10    | .041              |
| July.....                            | 2.289       | 76.30    | .118              | .82         | 27.52    | .031              |
| August.....                          | 1.969       | 65.63    | .090              | 2.10        | 70.00    | .081              |
| September.....                       | 1.739       | 57.97    | .066              | 1.11        | 37.20    | .043              |
| October.....                         | 2.876       | 95.86    | .122              | 1.59        | 53.11    | .061              |
| November.....                        | 2.998       | 99.97    | .114              | 1.46        | 49.25    | .057              |
| December.....                        | 3.296       | \$1.09   | .126              | 2.23        | 74.33    | .086              |
| Average.....                         | 2.436       | 81.25    | .104              | 1.63        | 53.72    | .061              |



| Port Arthur-Fort William to Kingston | 1913.       |          |                   | 1914.       |          |                   |
|--------------------------------------|-------------|----------|-------------------|-------------|----------|-------------------|
|                                      | Per bushel. | Per ton. | Per ton per mile. | Per bushel. | Per ton. | Per ton per mile. |
|                                      | Cents.      | \$       | Cents.            | Cents.      | \$       | Cents.            |
| April.....                           |             |          |                   |             |          |                   |
| May.....                             |             |          |                   | 4.06        | 1.32     | .132              |
| June.....                            |             |          |                   | 2.38        | .71      | .068              |
| July.....                            |             |          |                   | 3.15        | 1.05     | .101              |
| August.....                          |             |          |                   | 2.72        | .91      | .088              |
| September.....                       |             |          |                   | 2.92        | .96      | .092              |
| October.....                         |             |          |                   | 3.37        | 1.11     | .108              |
| November.....                        |             |          |                   | 3.16        | 1.08     | .104              |
| December.....                        |             |          |                   | 3.75        | 1.25     | .120              |
| Average.....                         |             |          |                   | 3.08        | 1.00     | .096              |

There is an aspect of the broad matter of freight rates on wheat which should not be overlooked. The ship owners do not receive all of the freight charges. Out of the rate certain payments have to be made. These payments on cargoes form Fort William to Montreal were officially ascertained to be as follows:—

|                                     |                             |
|-------------------------------------|-----------------------------|
| Clearing house at Fort William..... | .01 to .03 cent per bushel. |
| Trimmers at Fort William.....       | .06 “ “                     |
| Elevation at Montreal.....          | .30 “ “                     |
| Shovelling at Montreal.....         | .20 “ “                     |
| Total.....                          | .59 cent per bushel         |

To Port Colborne the average deductions would amount to .44 per bushel, to Buffalo .41, and to Georgian Bay Ports .38.



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## MOVEMENT OF OTHER GRAIN.

Some attention was given in 1914 to the movement of Canadian grain other than wheat. The results for 1913 and 1914 were worked out, and they help to broaden the field of statistics in relation to waterborne traffic. The two chief items are oats and barley. The facts with respect to oats are as follow:—

| Canadian Oats.<br>Canadian Canal—Sault Ste. Marie.<br>1913. | April.   | May.      | June.     | July.     | August.    |
|---|----------|-----------|-----------|-----------|------------|
|   | Bushels. | Bushels.  | Bushels.  | Bushels.  | Bushels.   |
| Fort William and Port Arthur to Montreal.....               | 706,412  | 2,124,235 | 1,160,353 | 1,144,588 | 782,353    |
| “ “ “ Georgian Bay .....                                    |          | 1,213,235 | 679,823   | 40,000    | 999,235    |
| “ “ “ Other Canadian ports...                               | 54,294   | 1,309,883 | 447,529   | 75,471    | 1,181,706  |
| “ “ “ Buffalo.....  |          | 566,176   |           |           |            |
| Duluth and Superior to Montreal.....                        |          | 77,000    |           | 27,764    |            |
| “ “ “ Georgian Bay.....                                     |          |           |           |           |            |
| “ “ “ Other Canadian ports.....                             |          | 61,235    | 152,000   |           |            |
| “ “ “ Buffalo.....  |          |           |           |           |            |
| Total.....  | 760,706  | 5,351,764 | 2,439,705 | 1,287,823 | 2,963,294  |
|   | Oept.    | Oct.      | Nov.      | Dec.      | Total.     |
|   | Bushels. | Bushels.  | Bushels.  | Bushels.  | Bushels.   |
| Fort William and Port Arthur to Montreal....                | 373,765  | 1,313,765 | 1,208,470 | 121,765   | 8,935,706  |
| “ “ “ Georgian Bay...                                       | 10,000   | 2,020,823 | 1,538,706 | 2,292,176 | 8,793,998  |
| “ “ “ Other Canadian ports...                               | 384,588  | 333,588   | 310,000   | 238,000   | 4,335,059  |
| “ “ “ Buffalo.....  | 126,117  | 160,000   | 1,281,882 | 1,982,647 | 4,116,822  |
| Duluth and Superior to Montreal.....                        |          |           |           |           | 104,764    |
| “ “ “ Georgian Bay.....                                     |          |           |           |           |            |
| “ “ “ Other Canadian ports.....                             |          |           |           |           | 213,235    |
| “ “ “ Buffalo.....  |          |           |           |           |            |
| Total.....  | 894,470  | 3,828,176 | 4,339,058 | 4,634,588 | 26,499,584 |



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| Canadian Oats.<br>American Canal—Sault Ste. Marie.<br>1913. |   |                           | April.   | May.      | June.     | July.     | August.    |
|---|---|---------------------------|----------|-----------|-----------|-----------|------------|
|   |   |                           | Bushels. | Bushels.  | Bushels.  | Bushels.  | Bushels.   |
| Fort William and Port Arthur to Montreal....                |   |                           | 117,000  | 170,184   | 65,000    | 123,500   | ...        |
| "   | " | Georgian Bay .....        |          | 440,001   | 572,827   | 485,312   | 10,000     |
| "   | " | Other Canadian ports....  |          | 133,236   | .....     | 584,000   | 116,000    |
| "   | " | Buffalo... ..             | 237,672  | 1,135,629 | 273,427   | 233,394   | 100,715    |
| Duluth and Superior to Montreal.....                        |   |                           |          |           | 118,042   | .....     | .....      |
| "   | " | Georgian Bay.....         |          |           | 154,000   | 157,000   | .....      |
| "   | " | Other Canadian ports..... |          |           |           |           | .....      |
| "   | " | Buffalo.....              |          | 345,029   | 14,514    |           | .....      |
| Total.....  |   |                           | 354,672  | 2,224,079 | 1,197,810 | 1,583,206 | 226,715    |
|   |   |                           | Sept.    | Oct.      | Nov.      | Dec.      | Total.     |
|   |   |                           | Bushels. | Bushels.  | Bushels.  | Bushels.  | Bushels.   |
| Fort William and Port Arthur to Montreal....                |   |                           |          |           | 103,000   | .....     | 578,684    |
| "   | " | Georgian Bay              | 18,876   | 364,000   | 35,000    | .....     | 1,926,016  |
| "   | " | Other Canadian ports...   | 70,712   | 51,000    | .....     | .....     | 954,948    |
| "   | " | Buffalo... ..             | 150,468  | 2,592,908 | 5,125,051 | 2,241,286 | 12,090,550 |
| Duluth and Superior to Montreal... ..                       |   |                           |          |           |           |           | 118,042    |
| "   | " | Georgian Bay.....         | 212,000  | .....     | 101,000   | .....     | 624,000    |
| "   | " | Other Canadian ports..... |          |           |           |           | .....      |
| "   | " | Buffalo.....              |          | 272,000   | .....     | .....     | 631,543    |
| Total.....  |   |                           | 452,056  | 3,279,908 | 5,364,051 | 2,241,286 | 16,923,783 |



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| Canadian Oats.<br>Canadian and American Canals.<br>Sault Ste. Marie.<br>1913. |   |                         | April.    | May.      | June.     | July.     | August.    |
|---|---|-------------------------|-----------|-----------|-----------|-----------|------------|
|   |   |                         | Bushels.  | Bushels.  | Bushels.  | Bushels.  | Bushels.   |
| Fort William and Port Arthur to Montreal.....                                 |   |                         | 823,412   | 2,294,419 | 1,225,353 | 1,268,088 | 782,353    |
| "   | " | Georgian Bay            |           | 1,653,236 | 1,252,650 | 525,312   | 1,009,235  |
| "   | " | Other Canadian ports... | 54,294    | 1,443,119 | 447,529   | 659,471   | 1,297,706  |
| "   | " | Buffalo.....            | 237,672   | 1,701,805 | 273,427   | 233,394   | 100,715    |
| Duluth and Superior to Montreal.....  |   |                         |           | 77,000    | 118,042   | 27,764    |            |
| "   | " | Georgian Bay.....       |           |           | 154,000   | 157,000   |            |
| "   | " | Other Canadian ports.   |           | 61,235    | 152,000   |           |            |
| "   | " | Buffalo.....            |           | 345,029   | 14,514    |           |            |
| Total.....  |   |                         | 1,115,378 | 7,575,843 | 3,637,515 | 2,871,029 | 3,190,009  |
|   |   |                         | Sept.     | Oct.      | Nov.      | Dec.      | Total.     |
|   |   |                         | Bushels.  | Bushels.  | Bushels.  | Bushels.  | Bushels.   |
| Fort William and Port Arthur to Montreal...                                   |   |                         | 373,765   | 1,313,765 | 1,311,470 | 121,765   | 9,514,390  |
| "   | " | Georgian Bay            | 28,876    | 2,384,823 | 1,573,706 | 2,292,176 | 10,720,014 |
| "   | " | Other Canadian ports... | 455,300   | 384,588   | 310,000   | 238,000   | 5,290,007  |
| "   | " | Buffalo.....            | 276,585   | 2,752,908 | 6,406,933 | 4,223,933 | 16,207,372 |
| Duluth and Superior to Montreal.....  |   |                         |           |           |           |           | 222,806    |
| "   | " | Georgian Bay.....       | 212,000   |           | 101,000   |           | 624,000    |
| "   | " | Other Canadian ports.   |           |           |           |           | 213,235    |
| "   | " | Buffalo.....            |           | 272,000   |           |           | 631,543    |
| Total.....  |   |                         | 1,346,526 | 7,108,084 | 9,703,109 | 6,875,874 | 43,423,367 |



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| Canadian Oats.<br>Canadian Canal.<br>1914. | April.    | May.      | June.     | July.     | August.    |
|--|-----------|-----------|-----------|-----------|------------|
|  | Bushels.  | Bushels.  | Bushels.  | Bushels.  | Bushels.   |
| Fort William to Montreal.....              | 1,204,353 | 1,967,647 | 1,566,647 | 418,647   | 565,000    |
| “ Georgian Bay.....                        | 417,000   | 2,082,412 | 1,506,235 | 117,529   | 135,000    |
| “ other Canadian ports.....                |           | 1,213,176 | 786,000   | 45,000    | 240,000    |
| “ Buffalo.....                             | 183,823   | 324,765   | 105,588   |           |            |
| Duluth to Montreal.....                    |           |           | 130,000   |           |            |
| “ Georgian Bay.....                        |           |           | 120,000   |           |            |
| “ other Canadian ports.....                |           |           | 201,588   |           |            |
| “ Buffalo.....                             |           |           |           |           |            |
| Total.....                                 | 1,805,176 | 5,588,000 | 4,416,058 | 581,176   | 940,000    |
|  | Sept.     | October.  | Nov.      | December. | Total.     |
|  | Bushels.  | Bushels.  | Bushels.  | Bushels.  | Bushels.   |
| Fort William to Montreal.....              | 715,647   | 1,641,059 | 544,235   | 30,000    | 8,653,235  |
| “ Georgian Bay.....                        | 16,706    | 465,000   | 1,910,000 | 832,000   | 7,481,882  |
| “ other Canadian ports.....                | 353,000   | 851,353   | 532,706   | 271,000   | 4,292,235  |
| “ Buffalo.....                             |           | 291,707   |           |           | 905,883    |
| Duluth to Montreal.....                    |           |           |           |           | 130,000    |
| “ Georgian Bay.....                        |           |           |           |           | 120,000    |
| “ other Canadian ports.....                |           |           |           |           | 201,588    |
| “ Buffalo.....                             |           |           |           |           |            |
| Total.....                                 | 1,085,353 | 3,249,119 | 2,986,941 | 1,133,000 | 21,784,823 |



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| Canadian Oats.<br>—<br>American Canal.<br>1914. | April     | May.     | June.    | July.     | August.   |
|---|-----------|----------|----------|-----------|-----------|
|   | Bushels.  | Bushels. | Bushels. | Bushels.  | Bushels.  |
| Fort William to Montreal.....                   |           |          | 112,941  |           | 122,353   |
| “ Georgian Bay.....                             | 315,294   | 196,706  | 155,647  |           | 39,529    |
| “ other Canadian ports..                        |           | 317,882  |          |           |           |
| “ Buffalo.....                                  | 1,460,000 | 298,353  | 9,176    |           | 1,352     |
| Duluth to Montreal.....                         |           |          | 218,530  |           |           |
| “ Georgian Bay .....                            |           |          |          |           |           |
| “ other Canadian ports.....                     |           |          | 164,000  |           |           |
| “ Buffalo.....                                  |           |          |          | 133,882   |           |
| Total.....                                      | 1,775,294 | 812,941  | 660,294  | 133,882   | 163,234   |
|   | Sept.     | October. | Nov.     | December. | Total.    |
|   | Bushels.  | Bushels. | Bushels. | Bushels.  | Bushels.  |
| Fort William to Montreal.....                   |           |          |          |           | 235,294   |
| “ Georgian Bay.....                             |           | 97,353   | 20,529   |           | 825,058   |
| “ other Canadian ports.....                     |           |          |          |           | 317,882   |
| “ Buffalo.....                                  | 3,059     | 666,882  | 98,882   | 23,528    | 2,561,232 |
| Duluth to Montreal.....                         |           |          |          |           | 218,530   |
| “ Georgian Bay.....                             |           |          |          |           |           |
| “ other Canadian ports.....                     |           |          |          |           | 164,000   |
| “ Buffalo.....                                  |           |          |          |           | 133,882   |
| Total.....                                      | 3,059     | 764,235  | 119,411  | 23,528    | 4,455,878 |



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| Canadian Oats.<br>Canadian and American Canals.<br>1914. |  | April.    | May.      | June.     | July.     | August.    |
|--|--|-----------|-----------|-----------|-----------|------------|
|  |  | Bushels.  | Bushels.  | Bushels.  | Bushels.  | Bushels.   |
| Fort William to Montreal.....                            |  | 1,204,353 | 1,967,647 | 1,679,588 | 418,647   | 687,353    |
| “ Georgian Bay .....                                     |  | 732,294   | 2,279,118 | 1,661,882 | 117,529   | 174,529    |
| “ other Canadian ports.....                              |  |           | 1,531,058 | 786,000   | 45,000    | 240,000    |
| “ Buffalo.....   |  | 1,643,823 | 623,118   | 114,764   |           | 1,352      |
| Duluth to Montreal... .                                  |  |           |           | 348,530   |           |            |
| “ Georgian Bay.....                                      |  |           |           | 120,000   |           |            |
| “ other Canadian ports.....                              |  |           |           | 365,588   |           |            |
| “ Buffalo.....   |  |           |           |           | 133,882   |            |
| Total.....   |  | 3,580,470 | 6,400,941 | 5,076,352 | 715,058   | 1,103,234  |
|  |  | Sept.     | October.  | Nov.      | December. | Total.     |
|  |  | Bushels.  | Bushels.  | Bushels.  | Bushels.  | Bushels.   |
| Fort William to Montreal.....                            |  | 715,647   | 1,641,059 | 544,235   | 30,000    | 8,888,529  |
| “ Georgian Bay.....                                      |  | 16,706    | 562,353   | 1,930,529 | 832,000   | 8,306,940  |
| “ other Canadian ports.....                              |  | 353,000   | 851,353   | 532,706   | 271,000   | 4,610,117  |
| “ Buffalo.....   |  | 3,059     | 958,589   | 98,882    | 23,528    | 3,467,115  |
| Duluth to Montreal.....                                  |  |           |           |           |           | 348,530    |
| “ Georgian Bay.....                                      |  |           |           |           |           | 120,000    |
| “ other Canadian ports.....                              |  |           |           |           |           | 365,588    |
| “ Buffalo.....   |  |           |           |           |           | 133,882    |
| Total.....   |  | 1,088,412 | 4,013,354 | 3,106,352 | 1,156,528 | 26,240,701 |

Of barley, 5,284,350 bushels came down in 1914, as compared with 11,516,844 bushels in 1913. Of flax seed, the volume shipped eastward in 1914 was 7,175,977 bushels, as against 21,281,723 in 1913. These figures relate to both the Canadian and American canals at Sault Ste. Marie.

A large volume of grain passed through the government elevator at Port Colborne during the year 1914. Port Colborne is a point of transfer. Large vessels, which cannot pass through the Welland canal, discharge their cargoes at the elevator and smaller vessels also make use of the transfer facilities at that point. The volume of American and Canadian grain handled during the season is given, by months, in the following statement:—



Statement of grain loaded at Government elevator at Port Colborne for Montreal during season of navigation 1914:—

SESSIONAL PAPER No. 20a

| Months.        | Canadian Grain. |           |          |          | American Grain. |          |          |          | Canadian and American. |          |
|----------------|-----------------|-----------|----------|----------|-----------------|----------|----------|----------|------------------------|----------|
|                | Wheat.          | Oats.     | Barley.  | Flax.    | Wheat.          | Oats.    | Barley.  | Corn.    |                        | Total.   |
|                | Bushels.        | Bushels.  | Bushels. | Bushels. | Bushels.        | Bushels. | Bushels. | Bushels. |                        | Bushels. |
| April.....     | 94,241          |           |          |          |                 |          |          |          | 94,241                 |          |
| May.....       | 4,112,900       | 666,614   | 322,970  |          | 371,916         |          |          | 29,033   | 5,503,433              |          |
| June.....      | 2,335,770       | 1,386,716 | 247,394  |          | 897,057         |          |          | 29,179   | 4,896,116              |          |
| July.....      | 2,525,900       | 329,669   | 65,000   |          | 1,862,831       |          | 261,500  |          | 5,044,900              |          |
| August.....    | 421,000         | 20,000    |          |          | 4,457,000       |          |          |          | 4,898,000              |          |
| September..... | 2,975,433       | 104,260   | 39,564   | 34,564   | 2,876,127       | 88,438   |          | 20,000   | 6,138,386              |          |
| October.....   | 5,047,174       | 346,360   | 218,194  | 47,951   | 1,076,741       |          |          | 36,427   | 6,772,847              |          |
| November.....  | 1,735,251       | 154,816   | 17,250   | 49,956   | 167,976         |          | 67,900   |          | 2,193,149              |          |
| December.....  | 138,776         |           |          |          |                 |          |          | 81,131   | 219,907                |          |
| Totals.....    | 19,386,445      | 3,008,435 | 910,372  | 132,472  | 11,709,648      | 88,438   | 329,400  | 195,770  | 35,760,979             |          |



INSURANCE RATES.

There were no material changes in the rates of marine insurance applicable to the Great Lakes during 1914. The official schedule was as follows:—

|  | First<br>Class. | Second<br>Class. |
|--|-----------------|------------------|
| To Lake Erie and Georgian Bay Ports—   |                 |                  |
| April 15, a.m., to April 30, p.m.....  | \$ 0 45         | \$ 0 60          |
| May 1, a.m., to August 31, p.m.....  | 0 30            | 0 40             |
| September 1, a.m., to November 30, midnight.....   | 0 45            | 0 65             |
| To Port Huron, Point Edward, Goderich, Sarnia and Detroit—   |                 |                  |
| April 1, a.m., to April 30, p.m.....   | 0 40            | 0 55             |
| May 1, a.m., to August 31, p.m.....  | 0 25            | 0 35             |
| September 1, a.m., to November 30, midnight.....   | 0 40            | 0 60             |
| To Kingston and Lake Ontario Ports, including Ogdensburg and Prescott—   |                 |                  |
| April 1, a.m., to April 30, p.m.....   | 0 65            | 0 75             |
| May 1, a.m., to August 31, p.m.....  | 0 45            | 0 55             |
| September 1, a.m., to November 30, midnight.....   | 0 60            | 1 00             |
| To Montreal direct without Transhipment—   |                 |                  |
| April 20, a.m., to October 31, p.m.....  | 0 60            | 1 10             |
| November 1, a.m., to November 30, p.m.....   | 0 70            | 1 25             |
| To Montreal via Kingston, Prescott and Ogdensburg and Transhipped—   |                 |                  |
| If transhipped at Kingston, Ogdensburg, or Prescott, and forwarded thence to Montreal, approved standard barges, add 15 cents to Kingston, Ogdensburg and Prescott rate. |                 |                  |
| From Lake Superior Ports to Lake Michigan Ports—   |                 |                  |
| Charge Lake Erie Ports' rates.   |                 |                  |
| From Lake Michigan Ports to Lake Michigan Ports—   |                 |                  |
| Charge 50 per cent of Lake Erie Ports' rates.  |                 |                  |
| From Port Colborne to Montreal—  |                 |                  |
| Sailing April 15, a.m., to August 31, midnight.....  | 0 30            | 0 40             |
| For through rates add the rate to lake Erie to the above. If transhipped again at Kingston, tariff charges apply.  |                 |                  |



GENERAL STATISTICS.

The following tables of general statistics will afford further information with regard to the canals of Canada:—

STATEMENT of Total Freight passed through the Canals for the following years.

| Years.    | From Canadian to Canadian Ports. |           | From Canadian to United States Ports. |           | From United States to United States Ports. |            | From United States to Canadian Ports. |           | Tons.     |            | Total Tons. |
|-----------|----------------------------------|-----------|---------------------------------------|-----------|--|------------|---------------------------------------|-----------|-----------|------------|-------------|
|           | Up.                              | Down.     | Up.                                   | Down.     | Up.  | Down.      | Up.                                   | Down.     | Up.       | Down.      |             |
|           |                                  |           |                                       |           |  |            |                                       |           |           |            |             |
| 1887..... | 336,648                          | 1,154,424 | 138,692                               | 202,563   | 151,805                                    | 192,528    | 86,374                                | 457,482   | 713,519   | 2,006,997  | 2,720,516   |
| 1888..... | 355,165                          | 1,146,260 | 138,127                               | 174,239   | 214,407                                    | 223,429    | 81,611                                | 428,357   | 789,310   | 1,972,287  | 2,761,597   |
| 1889..... | 384,777                          | 1,156,306 | 122,295                               | 198,497   | 267,224                                    | 300,193    | 81,243                                | 603,311   | 855,529   | 2,258,367  | 3,113,896   |
| 1890..... | 369,593                          | 1,137,011 | 144,368                               | 133,188   | 216,813                                    | 320,324    | 58,709                                | 533,021   | 789,505   | 2,123,542  | 2,913,047   |
| 1891..... | 370,120                          | 1,155,247 | 103,814                               | 123,193   | 248,188                                    | 307,958    | 50,747                                | 543,259   | 772,869   | 2,129,657  | 2,902,526   |
| 1892..... | 327,560                          | 1,322,137 | 173,538                               | 135,787   | 241,034                                    | 302,983    | 47,396                                | 481,301   | 789,528   | 2,242,208  | 3,031,736   |
| 1893..... | 351,706                          | 1,344,822 | 214,076                               | 141,602   | 247,329                                    | 385,769    | 54,912                                | 806,773   | 868,023   | 2,678,966  | 3,546,989   |
| 1894..... | 299,155                          | 1,140,606 | 204,175                               | 89,614    | 231,172                                    | 363,107    | 46,020                                | 568,866   | 780,522   | 2,162,193  | 2,942,715   |
| 1895..... | 264,824                          | 1,070,046 | 286,191                               | 91,177    | 362,637                                    | 608,778    | 62,285                                | 590,140   | 975,937   | 2,360,141  | *3,336,078  |
| 1896..... | 293,353                          | 1,619,668 | 259,659                               | 100,519   | 1,197,245                                  | 3,536,054  | 117,535                               | 867,040   | 1,867,792 | 6,123,281  | 7,991,073   |
| 1897..... | 275,587                          | 1,713,274 | 268,700                               | 187,960   | 669,142                                    | 4,369,314  | 108,787                               | 968,203   | 1,322,216 | 7,238,751  | 8,560,967   |
| 1898..... | 263,989                          | 1,819,887 | 187,253                               | 98,967    | 829,508                                    | 2,425,121  | 81,615                                | 912,135   | 1,362,365 | 5,256,110  | 6,618,475   |
| 1899..... | 296,208                          | 1,833,412 | 266,364                               | 115,133   | 732,030                                    | 2,129,988  | 125,678                               | 727,111   | 1,420,280 | 4,805,644  | 6,225,924   |
| 1900..... | 312,201                          | 1,632,915 | 270,033                               | 81,714    | 568,197                                    | 1,339,915  | 105,155                               | 703,563   | 1,255,586 | 3,758,107  | 5,013,693   |
| 1901..... | 340,805                          | 1,686,094 | 268,449                               | 201,231   | 507,204                                    | 1,801,696  | 177,715                               | 682,065   | 1,294,173 | 4,371,086  | 5,665,259   |
| 1902..... | 529,085                          | 2,064,480 | 308,212                               | 342,484   | 515,828                                    | 3,000,636  | 190,243                               | 562,229   | 1,543,368 | 5,969,829  | 7,513,197   |
| 1903..... | 648,150                          | 2,391,366 | 430,174                               | 408,500   | 863,337                                    | 3,130,816  | 373,456                               | 958,018   | 2,315,117 | 6,888,700  | 9,203,817   |
| 1904..... | 606,737                          | 2,047,499 | 511,887                               | 276,578   | 699,784                                    | 2,778,903  | 483,795                               | 851,053   | 2,302,203 | 5,954,033  | 8,256,236   |
| 1905..... | 736,976                          | 2,252,514 | 549,365                               | 347,089   | 607,228                                    | 3,183,895  | 577,528                               | 1,137,146 | 2,451,097 | 6,920,647  | 9,371,744   |
| 1906..... | 1,238,929                        | 2,355,855 | 627,094                               | 234,919   | 991,508                                    | 3,595,256  | 482,239                               | 997,385   | 3,339,770 | 7,183,415  | 10,523,185  |
| 1907..... | 1,034,733                        | 3,162,158 | 891,692                               | 226,138   | 1,991,959                                  | 11,060,878 | 819,369                               | 1,356,712 | 4,737,753 | 15,805,886 | 20,543,639  |
| 1908..... | 1,028,246                        | 3,292,422 | 560,736                               | 278,721   | 1,704,310                                  | 8,218,866  | 972,300                               | 1,447,219 | 4,265,592 | 13,237,228 | 17,502,820  |
| 1909..... | 1,608,659                        | 3,504,849 | 1,060,715                             | 607,894   | 1,985,522                                  | 22,385,226 | 1,023,829                             | 1,544,054 | 5,744,349 | 27,976,399 | 33,720,748  |
| 1910..... | 2,312,740                        | 3,861,272 | 600,144                               | 661,436   | 3,323,822                                  | 29,530,163 | 995,749                               | 1,705,282 | 7,232,455 | 35,758,153 | 42,990,608  |
| 1911..... | 2,370,516                        | 3,910,558 | 572,470                               | 995,719   | 2,546,677                                  | 23,458,256 | 2,086,777                             | 2,089,380 | 7,576,440 | 30,453,913 | 38,030,353  |
| 1912..... | 2,340,444                        | 4,973,342 | 867,250                               | 961,838   | 2,042,819                                  | 32,434,735 | 1,343,288                             | 2,623,529 | 6,593,801 | 40,993,444 | 47,587,245  |
| 1913..... | 2,212,928                        | 6,286,637 | 967,712                               | 1,478,263 | 2,694,527                                  | 33,630,484 | 1,906,947                             | 2,876,415 | 7,782,114 | 44,271,799 | 52,053,913  |
| 1914..... | 1,474,124                        | 6,381,242 | 999,256                               | 618,275   | 1,491,563                                  | 21,610,033 | 1,264,343                             | 3,184,401 | 5,229,286 | 31,793,951 | 37,023,237  |

\*Sault Ste. Marie canal opened in August, 1895.



STATEMENT of the Tonnage of Canadian and United States Vessels for the following years.

CANADIAN VESSELS.

| Years.    | From Canadian to Canadian Ports. |           | From Canadian to United States Ports. |         | From United States to United States Ports. |         | From United States to Canadian Ports. |         | Tons.     |           | Total. Tons. | Number of Trips. |
|-----------|----------------------------------|-----------|---------------------------------------|---------|--|---------|---------------------------------------|---------|-----------|-----------|--------------|------------------|
|           | Up.                              | Down.     | Up.                                   | Down.   | Up.  | Down.   | Up.                                   | Down.   | Up.       | Down.     |              |                  |
|           |                                  |           |                                       |         |  |         |                                       |         |           |           |              |                  |
| 1887..... | 1,201,529                        | 1,194,665 | 162,554                               | 36,277  | 1,071                                      | 65      | 30,778                                | 221,013 | 1,395,932 | 1,452,020 | 2,847,952    | 18,991           |
| 1888..... | 1,113,290                        | 1,120,774 | 158,209                               | 34,368  | 1,252                                      | .....   | 22,553                                | 189,876 | 1,295,304 | 1,345,018 | 2,640,322    | 17,661           |
| 1889..... | 1,285,574                        | 1,207,892 | 188,131                               | 39,371  | 976  | 802     | 20,271                                | 252,565 | 1,494,952 | 1,500,630 | 2,995,582    | 19,393           |
| 1890..... | 1,314,127                        | 1,250,999 | 229,478                               | 32,909  | 929  | 351     | 14,003                                | 296,676 | 1,558,537 | 1,580,935 | 3,139,472    | 20,655           |
| 1891..... | 1,356,518                        | 1,287,168 | 201,758                               | 28,642  | 550  | 292     | 16,350                                | 244,176 | 1,575,176 | 1,560,278 | 3,135,454    | 19,246           |
| 1892..... | 1,517,249                        | 1,460,505 | 177,136                               | 29,184  | 1,466                                      | 394     | 14,659                                | 201,374 | 1,710,510 | 1,691,455 | 3,401,965    | 21,177           |
| 1893..... | 1,548,094                        | 1,422,326 | 170,186                               | 26,787  | 1,172                                      | 10      | 17,037                                | 248,442 | 1,736,489 | 1,697,565 | 3,434,054    | 20,757           |
| 1894..... | 1,319,792                        | 1,260,907 | 217,635                               | 19,298  | 2,177                                      | 5       | 6,394                                 | 222,696 | 1,545,998 | 1,502,906 | 3,048,904    | 19,027           |
| 1895..... | 1,258,848                        | 1,165,683 | 253,693                               | 13,383  | .....                                      | .....   | 5,889                                 | 285,553 | 1,518,440 | 1,464,619 | 2,983,059    | 17,136           |
| 1896..... | 1,547,757                        | 1,420,342 | 200,292                               | 5,234   | 157  | .....   | 4,115                                 | 271,809 | 1,752,321 | 1,697,385 | 3,449,706    | 20,972           |
| 1897..... | 1,629,192                        | 1,482,951 | 215,785                               | 11,378  | .....                                      | .....   | 3,533                                 | 297,898 | 1,848,510 | 1,792,227 | 3,640,737    | 21,466           |
| 1898..... | 1,704,661                        | 1,609,255 | 215,393                               | 4,927   | 499  | 518     | 6,805                                 | 255,927 | 1,927,358 | 1,870,627 | 3,797,985    | 21,509           |
| 1899..... | 1,865,643                        | 1,774,789 | 242,817                               | 32,436  | 925  | 3,691   | 42,290                                | 345,980 | 2,151,675 | 2,156,896 | 4,308,571    | 23,579           |
| 1900..... | 1,767,293                        | 1,681,340 | 265,926                               | 14,922  | 2,909                                      | 64      | 38,015                                | 358,781 | 2,074,143 | 2,055,107 | 4,129,250    | 21,755           |
| 1901..... | 1,615,952                        | 1,587,221 | 279,007                               | 82,541  | 3,300                                      | 2,908   | 97,332                                | 312,003 | 1,995,591 | 1,984,673 | 3,980,264    | 20,860           |
| 1902..... | 1,914,167                        | 1,840,787 | 241,356                               | 97,492  | 1,874                                      | 2,164   | 101,335                               | 286,520 | 2,258,732 | 2,226,963 | 4,485,695    | 22,198           |
| 1903..... | 2,061,258                        | 2,088,969 | 340,383                               | 143,614 | 7,018                                      | 3,082   | 188,896                               | 379,612 | 2,597,555 | 2,615,277 | 5,212,832    | 23,767           |
| 1904..... | 1,838,260                        | 1,907,886 | 299,245                               | 159,740 | 5,175                                      | 4,223   | 237,910                               | 319,661 | 2,380,590 | 2,391,510 | 4,772,100    | 21,851           |
| 1905..... | 2,059,097                        | 2,031,766 | 312,773                               | 188,138 | 11,820                                     | 3,191   | 262,401                               | 322,005 | 2,646,091 | 2,545,100 | 5,191,191    | 23,726           |
| 1906..... | 2,271,776                        | 2,264,476 | 292,705                               | 155,595 | 24,420                                     | 5,506   | 202,276                               | 309,567 | 2,791,177 | 2,735,144 | 5,526,321    | 25,498           |
| 1907..... | 2,561,948                        | 2,661,317 | 337,822                               | 129,246 | 9,153                                      | 7,331   | 238,172                               | 383,922 | 3,147,095 | 3,181,685 | 6,328,911    | 28,833           |
| 1908..... | 2,726,776                        | 2,748,139 | 318,327                               | 227,315 | 5,057                                      | 7,844   | 348,944                               | 398,387 | 3,399,104 | 3,381,685 | 6,780,789    | 29,040           |
| 1909..... | 3,335,187                        | 2,992,403 | 300,320                               | 217,989 | 82,591                                     | 111,236 | 257,945                               | 513,907 | 3,976,043 | 3,835,535 | 7,811,578    | 22,507           |
| 1910..... | 3,891,613                        | 3,504,463 | 315,656                               | 122,688 | 95,151                                     | 89,618  | 287,555                               | 627,046 | 4,597,975 | 4,343,815 | 8,931,790    | 25,337           |
| 1911..... | 3,997,073                        | 3,646,516 | 333,500                               | 176,690 | 8,499                                      | 2,332   | 393,012                               | 614,570 | 4,732,084 | 4,440,108 | 9,172,192    | 25,585           |
| 1912..... | 4,457,303                        | 4,168,304 | 617,407                               | 21,176  | 9,907                                      | 1,053   | 180,735                               | 781,450 | 5,265,352 | 4,971,983 | 10,237,335   | 27,371           |
| 1913..... | 4,964,635                        | 4,827,587 | 898,249                               | 67,031  | 3,531                                      | 5,231   | 348,477                               | 963,300 | 6,214,892 | 5,863,149 | 12,078,041   | 28,654           |
| 1914..... | 4,891,369                        | 4,976,317 | 764,317                               | 124,505 | 4,687                                      | 2,109   | 385,433                               | 902,119 | 6,045,806 | 6,005,050 | 12,050,856   | 26,125           |



STATEMENT of the Tonnage of Canadian and United States Vessels for the following years.

| Years.    | From Canadian to Canadian Ports. |         | From Canadian to United States Ports. |         | From United States to United States Ports. |            | From United States to Canadian Ports. |         | Tons.        |            | Total Tons. | Number of Trips. |
|-----------|----------------------------------|---------|---------------------------------------|---------|--|------------|---------------------------------------|---------|--------------|------------|-------------|------------------|
|           | Up.                              | Down.   | Up.                                   | Down.   | Up.  | Down.      | Up.                                   | Down.   | Up and Down. |            |             |                  |
|           |                                  |         |                                       |         |  |            |                                       |         |              |            |             |                  |
| 1887..... | 16,265                           | 17,925  | 38,857                                | 56,708  | 143,730                                    | 140,562    | 52,793                                | 98,840  | 251,645      | 315,035    | 566,680     | 3,883            |
| 1888..... | 14,304                           | 26,801  | 42,425                                | 50,047  | 177,714                                    | 156,095    | 49,778                                | 114,613 | 284,221      | 347,556    | 631,777     | 3,921            |
| 1889..... | 21,125                           | 26,449  | 55,996                                | 50,732  | 253,088                                    | 206,567    | 56,249                                | 160,442 | 386,458      | 444,190    | 830,648     | 4,542            |
| 1890..... | 10,390                           | 16,345  | 38,156                                | 36,397  | 248,418                                    | 234,728    | 39,697                                | 97,266  | 336,661      | 384,736    | 721,397     | 3,364            |
| 1891..... | 10,357                           | 29,851  | 70,665                                | 27,727  | 283,013                                    | 238,818    | 31,083                                | 146,602 | 395,118      | 442,998    | 838,116     | 3,602            |
| 1892..... | 12,023                           | 29,405  | 88,221                                | 22,763  | 280,315                                    | 229,437    | 37,037                                | 172,594 | 417,596      | 454,199    | 871,795     | 3,928            |
| 1893..... | 10,752                           | 34,303  | 214,047                               | 33,741  | 351,994                                    | 282,724    | 50,994                                | 307,740 | 627,787      | 658,508    | 1,286,295   | 4,585            |
| 1894..... | 18,528                           | 30,201  | 139,720                               | 20,830  | 302,562                                    | 269,788    | 37,406                                | 192,992 | 498,216      | 513,811    | 1,012,027   | 4,131            |
| 1895..... | 8,838                            | 24,768  | 139,554                               | 17,712  | 262,240                                    | 216,542    | 32,295                                | 185,730 | 441,927      | 444,752    | 886,679     | 4,427            |
| 1896..... | 11,496                           | 19,093  | 195,228                               | 21,953  | 357,205                                    | 292,359    | 40,416                                | 290,370 | 604,345      | 623,775    | 1,228,120   | 4,650            |
| 1897..... | 14,666                           | 18,367  | 269,430                               | 17,618  | 338,938                                    | 277,345    | 26,341                                | 347,698 | 649,375      | 661,028    | 1,310,403   | 4,675            |
| 1898..... | 12,142                           | 9,541   | 133,524                               | 32,880  | 308,878                                    | 305,464    | 32,331                                | 336,004 | 586,875      | 683,889    | 1,270,764   | 4,264            |
| 1899..... | 17,217                           | 18,044  | 172,897                               | 30,002  | 1,605,887                                  | 1,156,503  | 51,902                                | 234,336 | 1,846,848    | 1,438,885  | 3,285,733   | 6,101            |
| 1900..... | 13,316                           | 17,824  | 157,689                               | 30,443  | 1,208,725                                  | 744,276    | 45,741                                | 190,971 | 1,425,471    | 983,514    | 2,408,985   | 5,502            |
| 1901..... | 11,587                           | 18,706  | 177,169                               | 28,124  | 922,464                                    | 1,044,707  | 54,895                                | 224,622 | 1,166,115    | 1,316,159  | 2,482,274   | 5,634            |
| 1902..... | 13,622                           | 37,871  | 187,826                               | 70,641  | 1,756,948                                  | 1,654,672  | 123,257                               | 241,602 | 2,081,653    | 2,004,786  | 4,086,439   | 6,433            |
| 1903..... | 14,014                           | 24,168  | 265,208                               | 65,247  | 1,736,187                                  | 1,689,414  | 106,401                               | 335,836 | 2,121,810    | 2,114,665  | 4,236,475   | 6,695            |
| 1904..... | 10,122                           | 16,890  | 275,721                               | 39,993  | 1,464,316                                  | 1,475,085  | 68,081                                | 305,697 | 1,818,240    | 1,837,665  | 3,655,905   | 6,253            |
| 1905..... | 19,743                           | 19,444  | 364,985                               | 81,876  | 2,350,494                                  | 1,701,704  | 1,101,536                             | 456,459 | 2,836,758    | 2,259,483  | 5,096,241   | 7,085            |
| 1906..... | 34,306                           | 15,324  | 356,259                               | 78,561  | 2,738,623                                  | 1,928,131  | 115,675                               | 418,436 | 3,244,863    | 2,440,452  | 5,685,315   | 7,319            |
| 1907..... | 57,349                           | 72,018  | 304,591                               | 72,048  | 4,730,053                                  | 5,376,060  | 205,769                               | 623,941 | 5,463,767    | 6,141,067  | 11,604,834  | 9,328            |
| 1908..... | 54,587                           | 32,705  | 442,773                               | 124,120 | 2,975,624                                  | 4,142,392  | 218,835                               | 536,103 | 3,685,819    | 4,835,320  | 8,521,139   | 7,489            |
| 1909..... | 263,592                          | 109,407 | 442,176                               | 200,202 | 4,178,378                                  | 10,429,614 | 213,750                               | 621,903 | 5,098,196    | 11,361,126 | 16,459,322  | 9,996            |
| 1910..... | 119,222                          | 50,498  | 429,702                               | 305,330 | 5,509,417                                  | 14,488,565 | 299,462                               | 576,101 | 6,356,803    | 15,420,494 | 21,777,297  | 11,462           |
| 1911..... | 49,778                           | 12,643  | 626,897                               | 576,313 | 3,348,936                                  | 12,057,484 | 709,084                               | 850,487 | 4,734,695    | 13,496,927 | 18,231,622  | 10,370           |
| 1912..... | 50,296                           | 15,518  | 763,426                               | 470,330 | 5,778,534                                  | 16,011,911 | 614,311                               | 931,864 | 7,206,567    | 17,429,623 | 24,636,190  | 11,785           |
| 1913..... | 61,301                           | 29,788  | 673,382                               | 711,603 | 5,657,984                                  | 15,567,499 | 703,212                               | 834,019 | 7,095,879    | 17,142,909 | 24,238,788  | 10,739           |
| 1914..... | 39,246                           | 31,535  | 563,517                               | 373,829 | 3,292,736                                  | 10,259,835 | 268,800                               | 806,916 | 4,164,299    | 11,472,115 | 15,636,414  | 7,742            |



Vessel and Freight Tonnage passed through the Sault Ste. Marie Canal.

| Years.    | Canadian Vessels. |           | U.S. Vessels. |            | Total No. | Vessel Tonnage. | Freight Tonnage. |                |            | Lockages |     | Days Open.                          | Remarks. |
|-----------|-------------------|-----------|---------------|------------|-----------|-----------------|------------------|----------------|------------|----------|-----|-------------------------------------|----------|
|           | No.               | Tonnage.  | No.           | Tonnage.   |           |                 | Canadian         | United States. | Total.     | No.      | No. |                                     |          |
|           |                   |           |               |            |           |                 |                  |                |            |          |     |                                     |          |
| 1895..... | 609               | 126,534   | 583           | 623,092    | 1,192     | 749,626         | .....            | .....          | 595,837    | 699      | 87  | Canal first operated Sept. 9, 1895. |          |
| 1896..... | 2,070             | 589,407   | 3,066         | 3,805,749  | 5,136     | 4,395,156       | .....            | .....          | 4,577,399  | 3,042    | 218 |                                     |          |
| 1897..... | 1,909             | 405,546   | 2,359         | 3,391,936  | 4,268     | 3,797,482       | .....            | .....          | 4,947,065  | 2,604    | 238 |                                     |          |
| 1898..... | 1,811             | 403,931   | 1,864         | 2,353,699  | 3,675     | 2,757,630       | .....            | .....          | 3,055,387  | 2,520    | 243 |                                     |          |
| 1899..... | 2,000             | 558,552   | 1,769         | 2,389,457  | 3,769     | 2,948,009       | .....            | .....          | 3,006,664  | 2,610    | 239 |                                     |          |
| 1900..... | 1,790             | 577,310   | 1,291         | 1,617,438  | 2,081     | 2,194,748       | .....            | .....          | 2,035,677  | 2,205    | 238 |                                     |          |
| 1901..... | 2,796             | 775,151   | 1,408         | 1,674,597  | 4,204     | 2,449,748       | .....            | .....          | 2,820,394  | 2,910    | 246 |                                     |          |
| 1902..... | 3,080             | 1,366,930 | 1,964         | 3,237,372  | 5,044     | 4,604,302       | .....            | .....          | 4,729,268  | 3,418    | 264 |                                     |          |
| 1903..... | 2,711             | 1,615,939 | 1,640         | 3,146,897  | 4,351     | 4,762,746       | .....            | .....          | 5,511,868  | 3,242    | 256 |                                     |          |
| 1904..... | 2,637             | 1,555,042 | 1,325         | 2,675,663  | 3,962     | 4,230,705       | .....            | .....          | 5,030,705  | 3,022    | 241 |                                     |          |
| 1905..... | 3,970             | 1,803,299 | 1,692         | 2,734,349  | 5,662     | 5,537,637       | .....            | .....          | 5,473,406  | 4,031    | 255 |                                     |          |
| 1906..... | 3,922             | 1,959,252 | 1,758         | 4,399,872  | 5,680     | 6,359,124       | .....            | .....          | 6,574,039  | 4,152    | 253 |                                     |          |
| 1907..... | 3,217             | 2,154,688 | 3,132         | 9,961,281  | 6,349     | 12,115,969      | .....            | .....          | 15,588,165 | 4,596    | 238 |                                     |          |
| 1908..... | 3,289             | 2,603,232 | 2,204         | 7,035,655  | 5,293     | 9,638,887       | 2,092,231        | 10,666,985     | 12,759,216 | 3,667    | 235 |                                     |          |
| 1909..... | 2,597             | 2,988,936 | 3,734         | 14,850,738 | 6,331     | 17,839,674      | 3,366,495        | 24,494,750     | 27,861,245 | 5,046    | 240 |                                     |          |
| 1910..... | 2,744             | 3,173,494 | 5,228         | 20,187,704 | 7,972     | 23,361,198      | 2,345,619        | 33,050,068     | 36,395,687 | 6,110    | 248 |                                     |          |
| 1911..... | 2,713             | 3,108,880 | 4,068         | 16,252,340 | 6,781     | 19,361,220      | 3,177,581        | 27,774,128     | 30,951,709 | 6,802    | 236 |                                     |          |
| 1912..... | 2,643             | 3,296,229 | 5,213         | 22,536,015 | 7,856     | 25,832,244      | 4,090,362        | 35,579,293     | 39,669,655 | 6,200    | 240 |                                     |          |
| 1913..... | 3,279             | 3,793,434 | 5,006         | 22,181,007 | 8,285     | 25,974,441      | 4,954,734        | 37,744,590     | 42,699,324 | 6,266    | 246 |                                     |          |
| 1914..... | 3,011             | 3,473,292 | 2,966         | 13,827,870 | 5,977     | 17,301,162      | 3,609,747        | 23,989,437     | 27,599,184 | 4,712    | 239 |                                     |          |



CAPITAL EXPENDITURE.

The following statement brings the capital expenditure on the canals of the Dominion down to March 31, 1914. It must be understood, however, that the total shown is apart from the outlay by the Imperial Government on the Carillon and Grenville canal, as to which the records were lost in the destruction by fire of the Ordnance Office, Montreal, in 1852. The details are as follow:—

| Canal.                             | Construction. | Enlargement.  | Total.         |
|------------------------------------|---------------|---------------|----------------|
|                                    | \$ cts.       | \$ cts.       | \$ cts.        |
| Beauharnois.....                   | 1,636,690 26  |               | 1,636,690 26   |
| Carillon and Grenville.....        | 63,053 64     | 4,119,039 32  | 4,182,092 96   |
| Chambly.....                       | 637,056 76    | 94,639 76     | 731,696 52     |
| Cornwall.....                      | 1,945,624 73  | 5,297,179 48  | 7,242,804 21   |
| Culbute.....                       | 382,391 46    |               | 382,391 46     |
| Lachine.....                       | 2,589,532 85  | 11,173,882 04 | 13,763,414 89  |
| Lake St. Francis.....              |               | 75,906 71     | 75,906 71      |
| Lake St. Louis.....                |               | 298,176 11    | 298,176 11     |
| Murray.....                        | 1,248,946 71  |               | 1,248,946 71   |
| Rideau.....                        | 4,084,323 37  | 83,130 84     | 4,167,454 21   |
| Sault Ste. Marie.....              | 4,994,372 51  |               | 4,994,372 51   |
| Soulanges.....                     | 7,777,675 02  |               | 7,777,675 02   |
| Ste. Anne's.....                   | 134,456 51    | 1,035,759 12  | 1,170,215 63   |
| St. Lawrence River and Canals..... | 18,442 85     | 3,451,470 56  | 3,469,913 41   |
| St. Ours.....                      | 121,537 65    | 5,690 91      | 127,228 56     |
| St. Peter's.....                   | 648,547 14    |               | 648,547 14     |
| Tay.....                           | 489,599 23    |               | 489,599 23     |
| Trent.....                         | 13,611,034 95 |               | 13,611,034 95  |
| Welland.....                       | 7,693,824 03  | 21,749,473 88 | 29,443,297 91  |
| Williamsburg { Farran's Point..... |               | 877,090 57    | 10,491,098 07  |
| Galops.....                        |               | 6,121,213 70  |                |
| Rapide Plat.....                   |               | 2,158,242 00  |                |
| Williamsburg.....                  | 1,320,655 54  | 13,896 26     |                |
| St. Andrew's Lock.....             | 1,533,750 57  |               | 1,533,759 57   |
| Total.....                         | 50,931,524 78 | 56,554,791 26 | 107,486,316 04 |

The cost of maintenance for the fiscal year 1914 was \$1,753,897.51.

I have the honour to be, sir,

Your obedient servant,

J. L. PAYNE,  
*Comptroller of Statistics.*







CANAL STATISTICS

FOR

SEASON OF NAVIGATION, 1914.

GRAIN PASSED DOWN WELLAND.

The quantity of barley, corn, oats, peas, rye, and wheat passed down the Welland canal, from ports west of Port Colborne for a period of thirty-three years is as follows:—

| Quantity passed down to Montreal. |           | To Ports in Ontario. | Quantity from U.S. Ports to U.S. Ports. |
|-----------------------------------|-----------|----------------------|---|
|                                   | Tons.     | Tons.                | Tons.                                   |
| 1882.....                         | 180,694   | .....                | 63,881                                  |
| 1883.....                         | 186,814   | 10,650               | 121,876                                 |
| 1884.....                         | 142,194   | 12,153               | 104,537                                 |
| 1885.....                         | 96,569    | 11,909               | 117,346                                 |
| 1886.....                         | 203,940   | 9,881                | 151,551                                 |
| 1887.....                         | 185,034   | 11,838               | 134,868                                 |
| 1888.....                         | 160,358   | 25,599               | 169,664                                 |
| 1889.....                         | 267,769   | 19,075               | 213,766                                 |
| 1890.....                         | 288,513   | 16,899               | 245,932                                 |
| 1891.....                         | 295,509   | 6,805                | 202,710                                 |
| 1892.....                         | 261,954   | 8,942                | 201,540                                 |
| 1893.....                         | 501,806   | 25,555               | 222,958                                 |
| 1894.....                         | 273,651   | 16,699               | 203,979                                 |
| 1895.....                         | 231,491   | 32,096               | 133,823                                 |
| 1896.....                         | 461,049   | 73,386               | 160,372                                 |
| 1897.....                         | *560,254  | 53,257               | 157,756                                 |
| 1898.....                         | 519,532   | 31,279               | 144,612                                 |
| 1899.....                         | 332,746   | 40,197               | 68,011                                  |
| 1900.....                         | 244,661   | 17,525               | 84,589                                  |
| 1901.....                         | 151,566   | 13,732               | 83,370                                  |
| 1902.....                         | 208,215   | 22,787               | 81,164                                  |
| 1903.....                         | 351,936   | 29,062               | 111,828                                 |
| 1904.....                         | 198,246   | 23,711               | 102,523                                 |
| 1905.....                         | 341,431   | 42,061               | 129,270                                 |
| 1906.....                         | 304,935   | 33,351               | 176,119                                 |
| 1907.....                         | 635,573   | 42,032               | 163,295                                 |
| 1908.....                         | 756,141   | 38,142               | 135,172                                 |
| 1909.....                         | 652,742   | 40,238               | 129,587                                 |
| 1910.....                         | 789,661   | 63,657               | 115,457                                 |
| 1911.....                         | 836,924   | 51,560               | 121,655                                 |
| 1912.....                         | 961,855   | 47,866               | 117,195                                 |
| 1913.....                         | 1,265,368 | 63,806               | 122,069                                 |
| 1914.....                         | 1,836,456 | 90,910               | 70,186                                  |

During the last decade the quantity of agricultural products, as above passed down the Welland and St. Lawrence canals to Montreal has increased from 341,431 tons in 1905 to 1,836,456 tons in 1914, and the quantity passed down the Welland canal from United States ports to United States has decreased from 129,270 to 70,186 tons the same years.



5 GEORGE V., A. 1915

The quantity of barley, buckwheat, corn, oats, peas, rye, and wheat, arrived at Montreal via Grand Trunk and Canadian Pacific railways for a period of 15 years, is reported as follows:—

| Year.     | Tons.   |
|-----------|---------|
| 1900..... | 229,624 |
| 1901..... | 227,700 |
| 1902..... | 263,861 |
| 1903..... | 253,959 |
| 1904..... | 154,625 |
| 1905..... | 148,377 |
| 1906..... | 386,963 |
| 1907..... | 383,735 |
| 1908..... | 285,262 |
| 1909..... | 426,163 |
| 1910..... | 280,705 |
| 1911..... | 241,134 |
| 1912..... | 462,444 |
| 1913..... | 268,388 |
| 1914..... | 689,969 |

The quantity of the same articles passed down the whole length of the St. Lawrence canals to Montreal for the same period was:—

| Year.     | Tons.     |
|-----------|-----------|
| 1900..... | 295,928   |
| 1901..... | 203,316   |
| 1902..... | 242,225   |
| 1903..... | 400,057   |
| 1904..... | 220,076   |
| 1905..... | 375,630   |
| 1906..... | 449,673   |
| 1907..... | 684,697   |
| 1908..... | 776,374   |
| 1909..... | 652,742   |
| 1910..... | 789,661   |
| 1911..... | 836,924   |
| 1912..... | 964,187   |
| 1913..... | 1,265,376 |
| 1914..... | 1,836,456 |

Comparative shipments of grain by the St. Lawrence route, and railways, are as follows:—

QUANTITY OF GRAIN TO SEABOARD BY COMPETING ROUTES.

The quantity of grain and peas passed down the whole length of the St. Lawrence canals to Montreal is as follows:—

|               |                                     |
|---------------|-------------------------------------|
|               | Tons.                               |
| For 1913..... | 1,265,376                           |
| 1914.....     | 1,836,456                           |
|               | Showing an increase of..... 571,080 |

The quantity of grain and peas carried to Montreal via Canadian Pacific and Grand Trunk railways is reported as follows:—

|               |                                     |
|---------------|-------------------------------------|
|               | Tons.                               |
| For 1913..... | 268,388                             |
| 1914.....     | 689,969                             |
|               | Showing an increase of..... 421,581 |



## SESSIONAL PAPER No. 20a

The quantity of grain passed down the Welland canal in Canadian and United States vessels to Kingston and Prescott for fifteen years is as follows:—

In Canadian vessels there were,

|   | Tons.     |
|---|-----------|
| 1900, 325 cargoes, with an aggregate quantity of..... | 183,200   |
| 1901, 112 " " .....                                   | 132,558   |
| 1902, 131 " " .....                                   | 175,514   |
| 1903, 170 " " .....                                   | 218,840   |
| 1904, 115 " " .....                                   | 174,121   |
| 1905, 167 " " .....                                   | 239,418   |
| 1906, 205 " " .....                                   | 344,605   |
| 1907, 255 " " .....                                   | 427,813   |
| 1908, 355 " " .....                                   | 598,941   |
| 1909, 308 " " .....                                   | 550,276   |
| 1910, 383 " " .....                                   | 679,358   |
| 1911, 421 " " .....                                   | 728,223   |
| 1912, 504 " " .....                                   | 796,858   |
| 1913, 687 " " .....                                   | 1,128,324 |
| 1914, 911 " " .....                                   | 1,004,236 |

In the United States vessels there were,

|   | Tons.   |
|---|---------|
| 1900, 259 cargoes, with an aggregate quantity of..... | 163,575 |
| 1901, 135 " " .....                                   | 123,229 |
| 1902, 135 " " .....                                   | 136,652 |
| 1903, 219 " " .....                                   | 273,986 |
| 1904, 118 " " .....                                   | 150,359 |
| 1905, 235 " " .....                                   | 273,344 |
| 1906, 178 " " .....                                   | 269,800 |
| 1907, 263 " " .....                                   | 413,087 |
| 1908, 271 " " .....                                   | 330,514 |
| 1909, 174 " " .....                                   | 272,291 |
| 1910, 182 " " .....                                   | 295,714 |
| 1911, 173 " " .....                                   | 281,916 |
| 1912, 154 " " .....                                   | 330,058 |
| 1913, 253 " " .....                                   | 322,919 |
| 1914, 178 " " .....                                   | 219,462 |

One hundred and sixty-two Canadian and 49 American vessels took cargoes of 343,733 tons through to Montreal intact in 1908; 87 Canadian and 9 American of 135,582 in 1907; 74 Canadian and 10 American of 108,734 tons in 1906; 96 Canadian and 18 American of 180,206 in 1905; 56 Canadian and 16 American of 116,095 tons in 1904; 56 Canadian and 18 American of 99,582 tons in 1903; 19 Canadian and 17 American of 34,804 tons in 1902; 23 Canadian and 2 American of 17,303 tons in 1901, 15 of 7,924 tons in 1900, 2 of 558 tons in 1899, 7 of 2,426 in 1898, 7 of 2,324 in 1897, 3 of 1,176 in 1896, 4 of 1,344 tons in 1905, 2 cargoes of 810 tons in 1894, none in 1893, 2 in 1892 of 934 tons, and 3 in 1891 of 1,441 tons. Three vessels lightened a portion of their cargoes in 1901, 9 in 1900, 11 in 1899, 25 in 1898, 11 in 1897, 16 in 1896, 6 in 1895, 19 in 1894, 34 in 1893, 25 in 1892, and 44 in 1891; 222 vessels discharged the whole of their cargoes at Kingston in 1901, 540 in 1900, 316 in 1899, 473 in 1898, 359 in 1897, 335 in 1896, 169 in 1895, 188 in 1894, 369 in 1893, 220 in 1892, and 293 in 1891.



5 GEORGE V., A. 1915

The quantity of grain transhipped at Port Colborne in 1809 and the four previous years was as follows:—

| Articles.     | 1905.    | 1906.     | 1907.     | 1908.     | 1909.     |
|---------------|----------|-----------|-----------|-----------|-----------|
|               | Bushels. | Bushels.  | Bushels.  | Bushels.  | Bushels.  |
| Wheat.....    | 679,840  | 1,009,474 | 1,428,300 | 1,106,244 | 2,686,963 |
| Corn.....     | 104,027  | 110,629   | 112,036   |           |           |
| Rye.....      |          |           |           |           |           |
| Oats.....     |          | 29,118    | 30,824    | 23,945    |           |
| Barley.....   |          | 2,103     |           | 56,544    | 22,216    |
| Flaxseed..... |          |           | 30,040    | 49,628    | 8,202     |

WELLAND CANAL.

The total quantity of freight passed on the Welland canal during the season of 1914 was 3,860,969 tons; of this quantity 135,870 tons was way or local freight.

There were 3,004,920 tons of freight passed eastward, and 856,049 passed westward.

*East- and Westbound Through Freight.*

The total quantity of through freight passed through the whole length of the Welland canal during the season of 1914 was 3,725,099 tons.

Of this quantity 2,936,740 tons were eastbound and 788,359 westbound freight.

Of the eastbound through freight, Canadian vessels carried 2,426,846 tons and United States vessels carried 509,794 tons; and of the westbound through freight, Canadian vessels carried 451,449 tons and United States vessels carried 336,910 tons, or a total of 2,936,740 tons for Canadian, and 788,359 tons for American vessels.

ST. LAWRENCE CANALS.

The total quantity of freight passed through these canals during 1914 was 4,391,493 tons; of this quantity, 3,405,539 tons passed eastward and 985,954 passed westward.

*East- and Westbound Through Freight.*

The total quantity of through freight was 3,692,919 tons; of this quantity 3,067,497 tons were eastbound and 625,422 tons were westbound.

*Way Freight.*

Of the total quantity of (way) or local freight, 338,045 tons were eastbound and 360,529 tons westbound freight.



## SESSIONAL PAPER No. 20a

## THROUGH TRAFFIC BETWEEN MONTREAL AND PORTS ON LAKE ERIE, MICHIGAN, ETC

The total quantity of through freight passed eastward from Lake Erie and westward from Montreal through the Welland and St. Lawrence canals, during fifteen years, was as follows:—

| Year.     | Eastward<br>to<br>Montreal. | Westward<br>from<br>Montreal. |
|-----------|-----------------------------|-------------------------------|
| 1900..... | 288,251                     | 6,217                         |
| 1901..... | 184,420                     | 13,714                        |
| 1902..... | 250,475                     | 25,289                        |
| 1903..... | 390,786                     | 100,699                       |
| 1904..... | 278,328                     | 71,512                        |
| 1905..... | 448,704                     | 72,482                        |
| 1906..... | 554,231                     | 96,791                        |
| 1907..... | 789,167                     | 1,281                         |
| 1908..... | 864,926                     | 3,472                         |
| 1909..... | 925,005                     | 191,510                       |
| 1910..... | 1,170,139                   | 172,360                       |
| 1911..... | 1,293,638                   | 233,335                       |
| 1912..... | 1,559,963                   | 236,979                       |
| 1913..... | 1,710,219                   | 333,592                       |
| 1914..... | 2,052,900                   | 360,645                       |

## THROUGH FREIGHT FROM UNITED STATES PORTS TO UNITED STATES PORTS.

The total quantity of through freight passed eastward and westward through the Welland canal, from United States ports to United States ports, for a period of fifteen years, was as follows:—

| Year.     | Eastward. | Westward. | Total.  |
|-----------|-----------|-----------|---------|
|           | Tons.     | Tons.     | Tons.   |
| 1900..... | 218,969   | 99,560    | 318,529 |
| 1901..... | 190,476   | 83,543    | 274,019 |
| 1902..... | 224,110   | 44,919    | 269,029 |
| 1903..... | 221,074   | 149,151   | 370,225 |
| 1904..... | 165,337   | 87,144    | 252,481 |
| 1905..... | 190,547   | 112,549   | 303,096 |
| 1906..... | 237,226   | 84,205    | 321,431 |
| 1907..... | 218,997   | 177,660   | 396,657 |
| 1908..... | 209,518   | 239,136   | 448,654 |
| 1909..... | 196,838   | 248,581   | 445,419 |
| 1910..... | 197,301   | 288,198   | 485,499 |
| 1911..... | 175,752   | 309,603   | 485,355 |
| 1912..... | 180,319   | 235,437   | 415,756 |
| 1913..... | 204,597   | 320,736   | 525,333 |
| 1914..... | 170,624   | 338,455   | 509,079 |

The total quantity of freight passed through the Welland canal from United States ports to United States ports shows a decrease of 16,254 tons, as compared with the previous year; and an increase of 190,550 tons as compared with 1900.



5 GEORGE V., A. 1915

The following statement shows the aggregate number of vessels and the total quantity of freight passed through the Welland canal, and the quantity passed between United States ports during the year 1867 to 1914, inclusive:—

| Fiscal Year.                | Aggregate<br>Number<br>of<br>Trips. | Total quantity<br>transported<br>on theWelland<br>Canal. | Quantity<br>passed from<br>United States<br>ports to<br>United States<br>ports. |
|-----------------------------|-------------------------------------|--|---|
|                             | Number.                             | Tons.  | Tons.   |
| 1867.....                   | 5,405                               | 933,260  | 458,386   |
| 1868.....                   | 6,157                               | 1,161,821  | 641,711   |
| 1869.....                   | 6,069                               | 1,231,903  | 688,700   |
| 1870.....                   | 7,356                               | 1,311,956  | 747,567   |
| 1871.....                   | 7,729                               | 1,478,122  | 772,756   |
| <i>Season of Navigation</i> |                                     |  |   |
| 1872.....                   | 6,063                               | 1,333,104  | 606,627   |
| 1873.....                   | 6,425                               | 1,506,484  | 656,208   |
| 1874.....                   | 5,814                               | 1,389,173  | 748,557   |
| 1875.....                   | 4,242                               | 1,038,050  | 477,809   |
| 1876.....                   | 4,789                               | 1,099,810  | 488,815   |
| 1877.....                   | 5,129                               | 1,175,398  | 493,841   |
| 1878.....                   | 4,429                               | 968,758  | 373,738   |
| 1879.....                   | 3,960                               | 865,664  | 284,043   |
| 1880.....                   | 4,104                               | 819,934  | 179,605   |
| 1881.....                   | 3,332                               | 686,506  | 194,173   |
| 1882.....                   | 3,334                               | 790,643  | 282,806   |
| 1883.....                   | 3,267                               | 1,005,156  | 432,611   |
| 1884.....                   | 3,138                               | 837,811  | 407,079   |
| 1885.....                   | 2,738                               | 784,928  | 384,509   |
| 1886.....                   | 3,589                               | 980,135  | 464,478   |
| 1887.....                   | 2,785                               | 777,918  | 340,501   |
| 1888.....                   | 2,647                               | 878,800  | 434,753   |
| 1889.....                   | 2,975                               | 1,085,273  | 563,584   |
| 1890.....                   | 2,883                               | 1,016,165  | 233,957   |
| 1891.....                   | 2,594                               | 975,013  | 553,800   |
| 1892.....                   | 2,615                               | 955,554  | 541,065   |
| 1893.....                   | 2,843                               | 1,294,823  | 631,667   |
| 1894.....                   | 2,412                               | 1,008,221  | 592,267   |
| 1895.....                   | 2,222                               | 869,595  | 469,779   |
| 1896.....                   | 2,766                               | 1,279,987  | 653,213   |
| 1897.....                   | 2,725                               | 1,274,292  | 564,694   |
| 1898.....                   | 2,384                               | 1,140,077  | 487,539   |
| 1899.....                   | 2,202                               | 789,770  | 360,529   |
| 1900.....                   | 2,399                               | 719,360  | 318,529   |
| 1901.....                   | 1,547                               | 620,209  | 274,019   |
| 1902.....                   | 1,568                               | 665,387  | 269,029   |
| 1903.....                   | 1,787                               | 1,002,919  | 370,225   |
| 1904.....                   | 1,433                               | 811,371  | 252,481   |
| 1905.....                   | 1,595                               | 1,092,050  | 305,096   |
| 1906.....                   | 1,536                               | 1,201,967  | 321,431   |
| 1907.....                   | 1,982                               | 1,614,132  | 396,743   |
| 1908.....                   | 2,351                               | 1,703,453  | 448,654   |
| 1909.....                   | 2,433                               | 2,025,951  | 445,419   |
| 1910.....                   | 2,544                               | 2,326,290  | 487,499   |
| 1911.....                   | 2,480                               | 2,537,629  | 485,355   |
| 1912.....                   | 2,905                               | 2,851,915  | 415,756   |
| 1913.....                   | 3,229                               | 3,570,714  | 525,333   |
| 1914.....                   | 3,692                               | 3,860,969  | 509,079   |



## SESSIONAL PAPER No. 20a

The total quantity of freight passed through the several divisions of the Canadian canal system during the season of 1914 is as follows:—

|                       | Farm<br>Stock. | Forest<br>Produce of<br>Wood. | Manu-<br>factures. | Products<br>of Mines. | Agricultural<br>Products. | Total.     |
|-----------------------|----------------|-------------------------------|--------------------|-----------------------|---------------------------|------------|
|                       | Tons.          | Tons.                         | Tons.              | Tons.                 | Tons.                     | Tons.      |
| Sault Ste. Marie..... | 217            | 40,956                        | 487,789            | 13,270,885            | 3,799,337                 | 27,599,184 |
| Welland.....          | 275            | 360,434                       | 361,174            | 1,022,708             | 2,116,378                 | 3,860,969  |
| St. Lawrence.....     | 6,905          | 668,775                       | 297,269            | 1,398,509             | 2,020,035                 | 4,391,493  |
| Chambly.....          | 211            | 293,242                       | 11,111             | 123,093               | 9,248                     | 436,905    |
| St. Peter's.....      | 1,543          | 3,126                         | 4,117              | 33,549                | 11,845                    | 54,180     |
| Murray.....           |                | 430                           | 21,605             | 61,723                | 149                       | 83,907     |
| Ottawa.....           | 3,183          | 171,440                       | 18,663             | 138,814               | 3,032                     | 335,132    |
| Rideau.....           | 3,010          | 15,041                        | 13,466             | 118,195               | 2,027                     | 151,739    |
| Trent.....            | 336            | 62,473                        | 3,043              | 1,068                 | 795                       | 67,715     |
| St. Andrew's.....     | 1              | 6,050                         | 288                | 35,652                | 22                        | 42,013     |

The total quantity of freight moved on the Welland canal was 3,860,969 tons, of which 2,116,378 tons were agricultural products.

On the St. Lawrence canals the total quantity of freight moved was 4,391,493 tons, of which 2,020,035 were agricultural products, and 297,269 tons were manufactures.

On the Ottawa canals the total quantity of freight moved was 335,132 tons; of this quantity, 171,440 tons were the produce of the forest.



5 GEORGE V., A. 1915

The United States canal was open to navigation during the season of—

|           |           |           |           |
|-----------|-----------|-----------|-----------|
| 1889..... | 234 days. | 1902..... | 256 days. |
| 1890..... | 228 “     | 1903..... | 249 “     |
| 1891..... | 225 “     | 1904..... | 223 “     |
| 1892..... | 233 “     | 1905..... | 245 “     |
| 1893..... | 219 “     | 1906..... | 249 “     |
| 1894..... | 234 “     | 1907..... | 233 “     |
| 1895..... | 231 “     | 1908..... | 231 “     |
| 1896..... | 232 “     | 1909..... | 236 “     |
| 1897..... | 234 “     | 1910..... | 224 “     |
| 1898..... | 241 “     | 1911..... | 237 “     |
| 1899..... | 231 “     | 1912..... | 237 “     |
| 1900..... | 238 “     | 1913..... | 245 “     |
| 1901..... | 230 “     | 1914..... | 242 “     |

The Canadian canal was open to navigation during the season of—

|           |          |           |           |
|-----------|----------|-----------|-----------|
| 1895..... | 87 days. | 1905..... | 255 days. |
| 1896..... | 218 “    | 1906..... | 253 “     |
| 1897..... | 238 “    | 1907..... | 238 “     |
| 1898..... | 243 “    | 1908..... | 235 “     |
| 1899..... | 239 “    | 1909..... | 240 “     |
| 1900..... | 238 “    | 1910..... | 248 “     |
| 1901..... | 246 “    | 1911..... | 236 “     |
| 1902..... | 264 “    | 1912..... | 240 “     |
| 1903..... | 256 “    | 1913..... | 246 “     |
| 1904..... | 241 “    | 1914..... | 239 “     |

The average number of vessels passing per day through the two canals for the season 1914 was 78.



COMPARATIVE STATEMENT of the Commerce through the United States St. Mary's Falls Canals and the Canadian Sault Ste. Marie Canal for the Seasons of 1913 and 1914.

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|                                | Traffic for 1914.     |                 | Total Traffic for |                 | Increase. | Decrease.   |
|--------------------------------|-----------------------|-----------------|-------------------|-----------------|-----------|-------------|
|                                | United States. Canal. | Canadian Canal. | Season of 1914.   | Season of 1913. |           |             |
| Vessels.....                   | 12,639                | 5,977           | 18,616            | 23,884          | .....     | 5,268       |
| Lockages.....                  | 8,790                 | 4,712           | 13,502            | 16,867          | 3,365     | .....       |
| Tonnage registered.....        | 24,690,381            | 17,301,162      | 41,991,543        | 58,037,060      | .....     | 16,046,517  |
| Tonnage freight.....           | 27,771,467            | 27,599,184      | 55,370,651        | 79,721,525      | .....     | 24,350,874  |
| Passengers.....                | 29,972                | 30,446          | 60,418            | 76,918          | .....     | 16,500      |
| Coal hard.....                 | 1,906,418             | 342,210         | 2,248,628         | 2,673,673       | .....     | 425,045     |
| Coal soft.....                 | 10,240,259            | 1,996,434       | 12,236,693        | 15,951,885      | .....     | 3,715,192   |
| Flour.....                     | 7,511,543             | 2,205,810       | 9,717,353         | 10,203,462      | .....     | 486,109     |
| Wheat.....                     | 52,190,614            | 98,067,167      | 150,257,781       | 204,446,661     | .....     | 54,188,880  |
| Grain, excluding wheat.....    | 36,044,479            | 32,165,065      | 68,209,544        | 113,632,293     | .....     | 55,422,749  |
| Manufactured and pig iron..... | 14,179                | 108,481         | 112,660           | 431,777         | .....     | 319,117     |
| Salt.....                      | 676,892               | 101,409         | 778,301           | 735,376         | 42,925    | .....       |
| Copper.....                    | 88,877                | 2,887           | 91,764            | 106,994         | .....     | 15,230      |
| Iron ore.....                  | 10,516,927            | 20,913,764      | 31,430,691        | 48,091,821      | .....     | 16,661,130  |
| Lumber, ft. B.M.....           | 439,019,000           | 20,596,200      | 459,615,200       | 600,066,000     | .....     | 141,450,800 |
| Silver ore.....                | .....                 | .....           | .....             | .....           | .....     | .....       |
| Building stone.....            | 867,130               | 392,256         | 1,259,386         | 481             | .....     | 481         |
| Unclassified freight.....      | .....                 | .....           | .....             | 1,748,486       | .....     | 489,100     |



C.—TABLE showing the Tonnage of the undermentioned Articles passed through the Welland canal in transit between Ports in the United States during a series of forty-four years, ended December 31, 1914.

| Years.    | Vegetable Food. |         |         |         |        |       |                  | Heavy Goods. |               |             |                 |         |        |         |
|-----------|-----------------|---------|---------|---------|--------|-------|------------------|--------------|---------------|-------------|-----------------|---------|--------|---------|
|           | Flour.          | Wheat.  | Corn.   | Barley. | Oats.  | Rye.  | *Other Articles. | Total.       | Railway Iron. | Other Iron. | Sugar and Salt. | Coal.   | Ores.  | Total.  |
|           |                 |         |         |         |        |       |                  |              |               |             |                 |         |        |         |
| Tons.     | Tons.           | Tons.   | Tons.   | Tons.   | Tons.  | Tons. | Tons.            | Tons.        | Tons.         | Tons.       | Tons.           | Tons.   | Tons.  | Tons.   |
| 1869..... | 30,681          | 211,085 | 91,149  | 2,942   | .....  | 667   | 1,006            | 337,530      | 68,064        | 14,334      | 89,086          | 28,566  | 35,912 | 235,962 |
| 1872..... | 10,482          | 124,695 | 89,761  | 1,391   | 7,400  | ..... | 608              | 234,337      | 24,040        | 13,239      | 49,843          | 95,741  | 59,401 | 224,264 |
| 1873..... | 10,805          | 127,727 | 101,329 | 1,920   | 1,188  | 3     | 392              | 243,366      | 4,659         | 13,826      | 40,507          | 170,242 | 62,942 | 292,176 |
| 1874..... | 8,230           | 229,053 | 125,627 | .....   | 5,948  | ..... | 5,368            | 374,226      | 5,742         | 8,941       | 22,888          | 203,673 | 19,651 | 260,895 |
| 1875..... | 1,881           | 113,832 | 54,188  | 2,641   | 2,946  | 500   | 1,920            | 177,908      | 14            | 4,123       | 12,931          | 192,767 | 34,616 | 244,451 |
| 1876..... | 5,187           | 96,247  | 58,138  | .....   | 1,905  | 525   | 403              | 162,405      | .....         | 5,531       | 29,395          | 167,110 | 25,808 | 227,844 |
| 1877..... | 3,342           | 107,396 | 65,260  | 1,603   | 2,314  | 258   | 413              | 180,586      | 8,976         | 8,688       | 8,336           | 172,868 | 41,107 | 239,975 |
| 1878..... | 1,316           | 65,542  | 60,026  | 859     | 277    | ..... | 341              | 128,361      | .....         | 10,713      | 3,892           | 150,583 | 13,535 | 178,723 |
| 1879..... | 159             | 53,791  | 33,401  | .....   | 464    | ..... | 11               | 87,826       | 2,405         | 3,648       | 6,318           | 118,573 | 17,797 | 148,741 |
| 1880..... | .....           | 30,611  | 16,122  | 1,551   | 296    | ..... | .....            | 48,580       | 4,743         | 3,515       | 371             | 65,945  | 18,380 | 92,954  |
| 1881..... | .....           | 34,320  | 30,031  | 924     | .....  | ..... | 10               | 65,285       | 1,313         | 5,570       | .....           | 83,858  | 6,464  | 97,205  |
| 1882..... | 107             | 30,227  | 32,433  | 537     | .....  | 684   | 14               | 64,002       | .....         | 4,076       | .....           | 158,552 | 14,533 | 177,161 |
| 1883..... | 2,041           | 54,382  | 66,128  | 735     | 731    | ..... | 8,579            | 132,496      | 1,209         | 6,901       | 8               | 196,462 | 24,891 | 229,471 |
| 1884..... | 1,715           | 40,956  | 53,707  | .....   | 9,874  | ..... | 8,170            | 114,422      | 698           | 599         | .....           | 210,790 | 15,100 | 227,187 |
| 1885..... | 124             | 53,235  | 63,229  | 732     | 882    | ..... | 1                | 118,203      | .....         | 1,594       | .....           | 198,416 | 15,029 | 215,039 |
| 1886..... | 7,591           | 53,258  | 94,048  | .....   | 4,799  | ..... | 13,201           | 172,888      | 156           | 5,328       | 1               | 189,964 | 11,364 | 206,813 |
| 1887..... | 11,780          | 37,678  | 83,431  | 1,732   | 12,050 | 179   | 10,859           | 157,530      | 15            | 4,406       | .....           | 82,780  | 627    | 87,828  |
| 1888..... | 8,563           | 39,999  | 102,974 | .....   | 26,510 | ..... | 11,598           | 189,825      | 63            | 1,601       | 56              | 173,259 | 2,309  | 177,288 |
| 1889..... | 5,017           | 39,229  | 147,045 | .....   | 27,492 | ..... | 17,225           | 236,208      | .....         | 1,587       | 896             | 227,476 | 1,204  | 231,163 |
| 1890..... | 9,204           | 31,527  | 180,842 | 6,519   | 27,030 | ..... | 20,497           | 275,619      | .....         | 504         | 208             | 162,231 | 1,020  | 164,563 |
| 1891..... | 6,802           | 32,097  | 127,494 | 8,113   | 52,823 | ..... | 26,115           | 253,444      | .....         | 292         | 705             | 186,572 | 1,773  | 189,342 |
| 1892..... | 11,018          | 26,950  | 131,222 | 6,433   | 36,935 | ..... | 31,992           | 244,550      | .....         | 576         | 2               | 183,895 | .....  | 184,473 |
| 1893..... | 6,588           | 28,187  | 198,777 | 16,751  | 23,870 | 864   | 36,352           | 311,389      | .....         | 344         | .....           | 206,827 | .....  | 207,171 |
| 1894..... | 17,795          | 53,846  | 105,329 | 28,095  | 27,621 | ..... | 60,462           | 198,358      | .....         | 297         | .....           | 188,521 | .....  | 188,818 |
| 1895..... | 10,169          | 27,881  | 100,512 | 7,904   | 17,020 | ..... | 46,316           | 209,802      | 181           | 246         | .....           | 149,490 | .....  | 149,917 |
| 1896..... | 16,224          | 34,878  | 175,094 | 11,128  | 16,137 | 490   | 46,456           | 300,407      | .....         | 146         | .....           | 207,348 | .....  | 207,494 |
| 1897..... | 7,237           | 28,919  | 169,057 | 14,173  | 14,969 | ..... | 41,887           | 276,242      | 965           | 15          | .....           | 165,143 | .....  | 166,123 |
| 1898..... | 4,212           | 11,268  | 150,667 | 6,909   | 12,732 | 1,197 | 22,671           | 209,656      | 770           | 339         | 4               | 156,814 | .....  | 157,927 |
| 1899..... | 6,118           | 12,926  | 81,777  | 2,424   | 19,526 | 923   | 18,198           | 141,892      | 351           | 1,646       | 553             | 88,931  | .....  | 91,481  |
| 1900..... | 7,966           | 18,771  | 60,545  | 2,402   | 39,706 | 2,149 | 14,248           | 145,787      | .....         | 953         | .....           | 46,024  | .....  | 46,977  |
| 1901..... | 7,165           | 23,557  | 55,531  | 7,119   | 26,344 | ..... | 14,016           | 143,732      | 83            | 80          | 105             | 46,702  | .....  | 46,970  |
| 1902..... | 13,785          | 32,639  | 66,111  | 7,418   | 10,006 | ..... | 12,675           | 142,634      | .....         | 214         | .....           | 12,911  | .....  | 13,125  |

\*Apples, meal of all kinds, peas, potatoes.



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C.—Table showing the Tonnage of the undermentioned Articles passed through the Welland canal in transit between Ports in the United States during a series of forty-four years, ended December 31, 1914—*Concluded*.

| Years.    | Vegetable Food. |        |         |         |        |       |        | Heavy Goods.    |               |             |                 |         |       |         |
|-----------|-----------------|--------|---------|---------|--------|-------|--------|-----------------|---------------|-------------|-----------------|---------|-------|---------|
|           | Flour.          | Wheat. | Corn.   | Barley. | Oats.  | Rye.  | *Other | Total Articles. | Railway Iron. | Other Iron. | Sugar and Salt. | Coal.   | Ores. | Total.  |
|           | Tons.           | Tons.  | Tons.   | Tons.   | Tons.  | Tons. | Tons.  | Tons.           | Tons.         | Tons.       | Tons.           | Tons.   | Tons. | Tons.   |
| 1903..... | 6,082           | 15,439 | 108,917 | 11,433  | 6,112  | 4,175 | 13,568 | 165,725         | 459           | .....       | .....           | 113,072 | ..... | 113,535 |
| 1904..... | 8,556           | 14,269 | 60,964  | 16,621  | 16,497 | ..... | 13,079 | 129,986         | .....         | .....       | .....           | 63,882  | ..... | 63,882  |
| 1905..... | 24,054          | 15,483 | 93,622  | 9,197   | 10,892 | ..... | 9,682  | 162,930         | .....         | 1           | .....           | 73,464  | ..... | 73,465  |
| 1906..... | 15,215          | 13,410 | 135,410 | 9,266   | 11,323 | ..... | 10,678 | 195,132         | .....         | 169         | .....           | 33,523  | ..... | 33,692  |
| 1907..... | 18,898          | 21,892 | 124,474 | 2,812   | 4,741  | 2     | 22,001 | 194,820         | .....         | 30          | .....           | 110,347 | 4,050 | 114,420 |
| 1908..... | 17,694          | 24,651 | 99,830  | 7,418   | 2,070  | 2     | 21,393 | 172,788         | .....         | .....       | .....           | 158,351 | 1,400 | 159,751 |
| 1909..... | 15,452          | 17,940 | 100,967 | 4,224   | .....  | ..... | 22,683 | 161,266         | .....         | 5           | .....           | 131,131 | 1,531 | 132,667 |
| 1910..... | 11,859          | 10,717 | 126,938 | 3,840   | .....  | ..... | 8,751  | 161,925         | .....         | .....       | .....           | 201,893 | ..... | 201,893 |
| 1911..... | 2,852           | 4,950  | 116,705 | .....   | .....  | ..... | 7,565  | 132,072         | .....         | 1,863       | 26,303          | 223,942 | 4,483 | 256,491 |
| 1912..... | 9,878           | 15,911 | 91,254  | 2,160   | 1,400  | ..... | 12,714 | 133,317         | .....         | 300         | 11,078          | 166,419 | 4,979 | 182,776 |
| 1913..... | 11,967          | 20,258 | 114,662 | .....   | 7,407  | ..... | 8,685  | 162,979         | .....         | 505         | 18,387          | 237,230 | 5,202 | 261,324 |
| 1914..... | 8,580           | 32,657 | 85,700  | .....   | 5,210  | ..... | 10,278 | 142,425         | .....         | .....       | 25,258          | 236,976 | 6,341 | 268,575 |

\* Apples, meal all kinds, pease, potatoes.



A.—TABLE showing the total tonnage of the undermentioned articles moved Up  
December

| Year. | VEGETABLE FOOD. |           |         |         |         |        |                         |
|-------|-----------------|-----------|---------|---------|---------|--------|-------------------------|
|       | Flour.          | Wheat.    | Corn.   | Barley. | Oats.   | Rye.   | Other<br>Articles.<br>† |
|       | Tons.           | Tons.     | Tons.   | Tons.   | Tons.   | Tons.  | Tons.                   |
| 1869* | 45,674          | 313,825   | 120,599 | 20,951  | .....   | 904    | 1,937                   |
| 1872  | 26,651          | 239,998   | 254,902 | 6,035   | 7,752   | 64     | 2,745                   |
| 1873  | 30,665          | 355,847   | 180,169 | 8,225   | 1,194   | 3      | 3,777                   |
| 1874  | 24,019          | 413,212   | 181,151 | 18,871  | 5,954   | 513    | 8,677                   |
| 1875  | 13,964          | 253,835   | 103,749 | 35,751  | 3,383   | 917    | 6,337                   |
| 1876  | 15,778          | 201,906   | 144,501 | 18,455  | 24,496  | 1,454  | 3,198                   |
| 1877  | 13,558          | 253,953   | 169,196 | 19,870  | 2,810   | 2,439  | 2,355                   |
| 1878  | 9,121           | 191,982   | 185,931 | 10,979  | 3,088   | .....  | 2,302                   |
| 1879  | 10,710          | 274,570   | 144,506 | 4,655   | 1,239   | 440    | 2,444                   |
| 1880  | 12,679          | 242,020   | 163,738 | 17,772  | 477     | 1,016  | 1,480                   |
| 1881  | 9,959           | 127,832   | 101,075 | 24,509  | .....   | 1,844  | 2,086                   |
| 1882  | 12,261          | 215,056   | 54,799  | 20,126  | 611     | 3,226  | 403                     |
| 1883  | 13,471          | 152,794   | 182,269 | 10,436  | 731     | 1,642  | 10,983                  |
| 1884  | 13,683          | 144,851   | 118,811 | 7,155   | 10,746  | 1,320  | 9,168                   |
| 1885  | 13,334          | 124,206   | 117,536 | 15,801  | 1,116   | .....  | 1,912                   |
| 1886  | 19,474          | 154,169   | 219,442 | 1,595   | 4,911   | 564    | 14,657                  |
| 1887  | 23,949          | 221,927   | 114,938 | 9,574   | 12,050  | .....  | 12,533                  |
| 1888  | 16,983          | 160,963   | 194,886 | 5,906   | 26,629  | 811    | 13,608                  |
| 1889  | 7,931           | 126,664   | 353,595 | 4,272   | 28,356  | 2,673  | 18,552                  |
| 1890  | 14,461          | 118,002   | 327,394 | 10,830  | 27,728  | 1,549  | 20,876                  |
| 1891  | 13,517          | 198,658   | 185,180 | 8,113   | 52,959  | 64,888 | 28,042                  |
| 1892  | 17,046          | 232,019   | 192,548 | 6,433   | 37,173  | 9,392  | 32,815                  |
| 1893  | 15,235          | 258,392   | 441,092 | 18,599  | 31,283  | 3,671  | 36,981                  |
| 1894  | 33,628          | 270,993   | 169,233 | 28,353  | 27,962  | 567    | 60,673                  |
| 1895  | 44,044          | 203,088   | 164,894 | 8,689   | 18,236  | 1,007  | 46,463                  |
| 1896  | 42,425          | 320,563   | 320,444 | 11,368  | 28,178  | 9,405  | 56,591                  |
| 1897  | 9,065           | 324,743   | 390,615 | 14,173  | 25,161  | 8,483  | 44,674                  |
| 1898  | 5,578           | 207,647   | 437,861 | 12,286  | 17,502  | 16,127 | 23,182                  |
| 1899  | 11,625          | 197,732   | 204,004 | 2,907   | 24,037  | 923    | 18,460                  |
| 1900  | 10,968          | 137,800   | 163,509 | 4,035   | 41,055  | 3,538  | 14,815                  |
| 1901  | 18,978          | 151,586   | 67,756  | 7,119   | 28,485  | 2,961  | 14,024                  |
| 1902  | 22,282          | 225,171   | 67,647  | 7,418   | 11,232  | 4,079  | 12,963                  |
| 1903  | 25,998          | 259,031   | 210,758 | 14,656  | 7,911   | 4,904  | 13,994                  |
| 1904  | 35,049          | 165,138   | 116,444 | 27,171  | 16,582  | .....  | 13,183                  |
| 1905  | 38,512          | 254,458   | 180,921 | 55,432  | 36,072  | 1,711  | 9,883                   |
| 1906  | 18,294          | 326,798   | 211,805 | 31,446  | 49,306  | 1,784  | 10,739                  |
| 1907  | 22,739          | 488,565   | 271,693 | 13,240  | 73,369  | 2,270  | 22,683                  |
| 1908  | 23,209          | 732,131   | 127,402 | 31,172  | 33,423  | 6,667  | 21,668                  |
| 1909  | 38,763          | 590,196   | 140,902 | 23,151  | 75,135  | 33     | 30,221                  |
| 1910  | 41,152          | 587,493   | 229,980 | 21,575  | 136,233 | .....  | 18,149                  |
| 1911  | 57,061          | 562,282   | 273,932 | 15,029  | 163,333 | 112    | 11,360                  |
| 1912  | 45,807          | 795,989   | 121,333 | 25,241  | 185,546 | 714    | 14,626                  |
| 1913  | 45,710          | 1,005,362 | 144,354 | 96,889  | 199,794 | 6,867  | 10,640                  |
| 1914  | 87,701          | 1,599,909 | 112,133 | 89,622  | 225,668 | 10,220 | 10,318                  |

\* Fiscal.      † Apples, meal of all kinds, peas, potatoes.



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and Down, through the Welland canal, during a period of forty-four years, ended 31, 1914.

| Total.    | Railway<br>Iron. | Other Iron. | Sugar and<br>Salt. | Iron & Salt<br>having paid<br>full tolls on<br>St. Lawrence<br>canals. | Coal.   | Ores.   | Total.    |
|-----------|------------------|-------------|--------------------|--|---------|---------|-----------|
| Tons      | Tons.            | Tons.       | Tons.              | Tons.  | Tons.   | Tons.   | Tons.     |
| 503,860   | 46,806           | 16,924      | 91,575             | 37,153   | 103,126 | 58,781  | 275,623   |
| 538,147   | 26,217           | 17,141      | 50,540             | 44,243   | 186,932 | 98,605  | 3,678     |
| 579,880   | 6,923            | 20,754      | 40,850             | 17,157   | 339,016 | 118,685 | 43,387    |
| 647,397   | 6,032            | 12,068      | 23,309             | 9,579  | 323,503 | 56,825  | 431,316   |
| 417,936   | 1,517            | 7,588       | 13,509             | 9,962  | 321,306 | 43,683  | 397,565   |
| 409,788   | 51               | 7,997       | 30,300             | 20,327   | 288,211 | 81,654  | 378,540   |
| 464,181   | 9,630            | 9,696       | 9,173              | 3,983  | 323,869 | 42,758  | 399,109   |
| 403,403   | 10               | 11,518      | 3,980              | 12,686   | 295,318 | 15,229  | 338,741   |
| 438,564   | 2,782            | 5,797       | 7,174              | 17,796   | 192,957 | 19,164  | 245,670   |
| 442,182   | 5,360            | 4,812       | 413                | 22,273   | 109,986 | 34,139  | 176,983   |
| 269,395   | 4,585            | 7,013       | 10                 | 30,682   | 128,113 | 18,785  | 189,188   |
| 306,482   |                  | 5,348       | 50                 | 17,327   | 237,559 | 23,700  | 283,984   |
| 373,326   | 1,237            | 7,922       | 66                 | 17,037   | 307,058 | 31,785  | 365,105   |
| 305,734   | 698              | 652         | 461                | 3,242  | 274,471 | 53,205  | 332,729   |
| 273,905   | 78               | 2,055       | 597                | 14,243   | 248,272 | 26,728  | 291,973   |
| 414,812   | 166              | 6,123       | 48                 | 12,324   | 271,356 | 27,447  | 317,464   |
| 394,971   | 1,351            | 5,636       |                    | 6,715  | 145,193 | 13,866  | 172,761   |
| 419,786   | 93               | 3,220       | 316                | 13,617   | 223,871 | 16,872  | 257,989   |
| 542,043   | 47               | 2,479       | 1,254              | 20,269   | 268,305 | 2,435   | 294,789   |
| 519,291   |                  | 753         | 1,027              | 28,047   | 202,384 | 8,138   | 240,249   |
| 367,177   | 127              | 1,610       | 2,567              | 7,953  | 224,644 | 3,415   | 240,316   |
| 527,426   | 163              | 1,567       | 878                | 3,666  | 211,616 | 355     | 218,245   |
| 805,253   | 6                | 2,075       | 374                | 8,139  | 233,096 |         | 243,690   |
| 591,409   |                  | 3,072       | 159                | 977  | 203,608 |         | 207,816   |
| 486,421   | 185              | 6,245       | 54                 | 2,819  | 158,866 | 1,140   | 169,309   |
| 788,974   | 1,192            | 6,332       | 82                 | 3,264  | 223,445 | 1,158   | 235,473   |
| 816,914   | 7,206            | 17,012      | 227                | 590  | 176,226 |         | 201,261   |
| 720,183   | 1,444            | 11,722      | 799                | 734  | 162,336 | 13,433  | 190,468   |
| 459,688   | 567              | 6,361       | 1,282              | 1,318  | 97,732  | 26,125  | 133,385   |
| 375,720   |                  | 8,190       | 533                | 4,800  | 47,392  | 58,400  | 119,315   |
| 290,909   | 83               | 6,094       | 327                | 8,773  | 49,480  | 99,487  | 164,244   |
| 350,792   | 64               | 7,488       |                    | 15,201   | 64,014  | 22,480  | 109,247   |
| 537,252   | 488              | 5,407       | 2,554              | 45,846   | 147,884 | 18,323  | 220,502   |
| 373,568   | 11,381           | 9,957       | 1,093              | 4,164  | 113,525 | 39,683  | 179,803   |
| 576,989   | 2,651            | 10,912      | 226                | 4,221  | 172,642 | 22,381  | 213,033   |
| 650,172   | 3,747            | 8,493       | 100                | 16,204   | 147,587 | 5,862   | 181,993   |
| 894,559   | 961              | 4,923       | 246                | 18,761   | 267,212 | 25,040  | 317,143   |
| 975,672   |                  | 35,726      | 429                |  | 316,921 | 18,004  | 371,080   |
| 898,401   |                  | 87,025      |                    |  | 377,681 | 33,301  | 498,007   |
| 1,034,582 |                  | 57,581      |                    |  | 577,491 | 34,311  | 609,383   |
| 1,083,109 |                  | 126,956     | 35,888             |  | 619,682 | 37,480  | 820,006   |
| 1,189,256 |                  | 139,991     | 21,630             |  | 709,696 | 82,376  | 953,693   |
| 1,509,616 |                  | 96,245      | 28,396             |  | 945,790 | 78,776  | 1,149,207 |
| 2,135,571 |                  | 34,037      | 35,060             |  | 949,306 | 14,151  | 1,032,554 |



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B.—TABLE showing the Total Way and Through Tonnage of the undermentioned articles cleared downward on the Welland canal during a series of forty-three years, ended December 31, 1914.

## VEGETABLE FOOD.

| Years.    | Flour. | Wheat.    | Corn.   | Barley. | Oats.   | Rye.   | Other<br>Articles.<br>† | Total.    |
|-----------|--------|-----------|---------|---------|---------|--------|-------------------------|-----------|
|           | Tons.  | Tons.     | Tons.   | Tons.   | Tons.   | Tons.  | Tons.                   | Tons.     |
| 1869..... | 44,110 | 310,090   | 119,541 | 3,920   |         | 680    | 1,541                   | 479,882   |
| 1872..... | 26,648 | 231,056   | 254,534 | 693     | 7,594   | 64     | 2,300                   | 524,889   |
| 1873..... | 30,660 | 345,720   | 180,042 | 643     | 1,188   | 3      | 3,557                   | 563,813   |
| 1874..... | 24,017 | 406,157   | 181,128 | 377     | 5,953   |        | 3,301                   | 620,933   |
| 1875..... | 13,930 | 248,555   | 103,477 | 813     | 3,383   | 500    | 4,304                   | 374,962   |
| 1876..... | 15,735 | 194,559   | 144,501 | 1,110   | 24,496  | 1,454  | 2,949                   | 384,807   |
| 1877..... | 13,588 | 248,894   | 169,185 | 10,216  | 2,810   | 2,405  | 1,833                   | 488,931   |
| 1878..... | 8,854  | 188,106   | 185,931 | 1,217   | 3,088   |        | 2,100                   | 389,296   |
| 1879..... | 10,588 | 271,545   | 114,276 | 803     | 1,196   |        | 2,387                   | 430,795   |
| 1880..... | 12,467 | 240,601   | 162,891 |         | 477     |        | 1,417                   | 417,853   |
| 1881..... | 9,655  | 121,393   | 103,075 | 252     |         | 6      | 1,371                   | 235,752   |
| 1882..... | 12,205 | 205,876   | 54,797  | 537     |         | 1,954  | 225                     | 275,594   |
| 1883..... | 13,256 | 146,741   | 182,143 | 975     | 731     | 518    | 10,971                  | 355,335   |
| 1884..... | 13,626 | 135,804   | 118,811 | 270     | 10,746  | 477    | 9,018                   | 288,752   |
| 1885..... | 13,322 | 114,090   | 117,536 | 618     | 1,116   |        | 1,628                   | 248,310   |
| 1886..... | 19,418 | 146,151   | 218,897 |         | 4,891   |        | 14,581                  | 403,928   |
| 1887..... | 23,940 | 210,755   | 114,938 | 1,711   | 12,050  |        | 12,149                  | 375,543   |
| 1888..... | 16,973 | 150,833   | 194,886 | 555     | 26,629  | 811    | 13,358                  | 404,045   |
| 1889..... | 7,922  | 120,498   | 353,595 | 197     | 28,356  | 1,918  | 18,273                  | 530,759   |
| 1890..... | 14,461 | 114,924   | 327,394 | 6,519   | 27,728  | 1,121  | 20,836                  | 512,983   |
| 1891..... | 13,517 | 196,326   | 185,177 | 8,113   | 52,959  | 65,071 | 27,895                  | 549,058   |
| 1892..... | 17,046 | 229,569   | 192,548 | 6,433   | 37,173  | 9,392  | 32,548                  | 524,709   |
| 1893..... | 15,232 | 257,203   | 441,092 | 18,461  | 31,283  | 3,671  | 36,981                  | 803,923   |
| 1894..... | 33,628 | 270,514   | 169,233 | 28,353  | 27,962  |        | 60,587                  | 590,277   |
| 1895..... | 43,895 | 202,636   | 164,894 | 8,689   | 18,236  |        | 46,435                  | 484,785   |
| 1896..... | 42,159 | 319,388   | 320,444 | 11,368  | 28,178  | 8,970  | 54,031                  | 784,538   |
| 1897..... | 9,025  | 322,993   | 390,615 | 14,173  | 25,127  | 8,483  | 44,651                  | 815,067   |
| 1898..... | 5,578  | 206,313   | 437,849 | 12,286  | 17,491  | 16,127 | 23,170                  | 718,814   |
| 1899..... | 11,625 | 197,732   | 204,004 | 2,424   | 23,541  | 923    | 18,440                  | 458,689   |
| 1900..... | 10,968 | 137,800   | 163,509 | 3,449   | 40,256  | 3,538  | 14,802                  | 374,322   |
| 1901..... | 18,937 | 151,325   | 67,757  | 7,119   | 28,281  | 2,961  | 14,021                  | 290,400   |
| 1902..... | 22,282 | 223,499   | 67,647  | 7,418   | 11,223  | 4,079  | 12,912                  | 349,060   |
| 1903..... | 25,997 | 257,370   | 210,758 | 14,656  | 7,911   | 4,904  | 13,982                  | 535,578   |
| 1904..... | 35,046 | 164,515   | 116,444 | 27,171  | 16,582  |        | 13,157                  | 372,915   |
| 1905..... | 38,512 | 247,599   | 180,921 | 55,432  | 36,072  | 1,711  | 9,882                   | 570,129   |
| 1906..... | 18,227 | 326,789   | 111,243 | 31,446  | 49,306  | 1,411  | 10,739                  | 549,161   |
| 1907..... | 22,689 | 488,565   | 271,693 | 13,240  | 73,369  | 2,270  | 22,683                  | 894,509   |
| 1908..... | 23,187 | 730,751   | 127,402 | 31,172  | 33,423  | 6,667  | 21,668                  | 974,270   |
| 1909..... | 38,763 | 590,074   | 140,902 | 23,151  | 75,135  | 33     | 30,206                  | 898,264   |
| 1910..... | 41,152 | 587,493   | 229,980 | 21,575  | 136,233 |        | 18,149                  | 1,034,582 |
| 1911..... | 57,061 | 562,282   | 273,932 | 14,622  | 163,333 | 112    | 11,360                  | 1,082,702 |
| 1912..... | 45,807 | 795,989   | 121,333 | 25,241  | 185,546 | 714    | 14,626                  | 1,189,256 |
| 1913..... | 45,710 | 1,005,362 | 144,354 | 96,889  | 199,794 | 6,867  | 10,640                  | 1,509,616 |
| 1914..... | 87,701 | 1,599,909 | 112,333 | 89,622  | 225,668 | 10,220 | 10,318                  | 2,135,571 |

\*Fiscal. †Apples, meal all kinds, potatoes.



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D.—STATEMENT showing the Quantity of Through Freight passed down the Welland canal in Canadian and United States vessels entering the canal at Port Colborne, during the Season of Navigation in 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913 and 1914.

| Articles.                     | Canadian Vessels. |            |       |           | United States Vessels. |            |       |            | Total.          |            |
|-------------------------------|-------------------|------------|-------|-----------|------------------------|------------|-------|------------|-----------------|------------|
|                               | Steam.            |            | Sail. |           | Steam.                 |            | Sail. |            | Steam and Sail. |            |
|                               | No.               | Tonnage.   | No.   | Tonnage.  | No.                    | Tonnage.   | No.   | Tonnage.   | No.             | Tonnage.   |
|                               | 329               | 151,850    | 76    | 45,918    | 243                    | 252,094    | 69    | 27,854     | 627             | 477,716    |
| 1903.                         |                   | Tons.      |       | Tons.     |                        | Tons.      |       | Tons.      |                 | Tons.      |
| Wheat.....                    |                   | 149,378    |       | 38,473    |                        | 60,514     |       | 6,305      |                 | 254,670    |
| Corn.....                     |                   | 21,356     |       | 4,682     |                        | 174,588    |       | 10,132     |                 | 210,758    |
| Barley.....                   |                   | 2,580      |       | 667       |                        | 11,409     |       |            |                 | 14,656     |
| Oats.....                     |                   | 306        |       | 1,335     |                        | 6,112      |       |            |                 | 7,753      |
| Pease.....                    |                   | 63         |       |           |                        | 22         |       |            |                 | 85         |
| Rye.....                      |                   |            |       |           |                        | 4,904      |       |            |                 | 4,904      |
| Coal.....                     |                   | 389        |       | 12,991    |                        | 8,133      |       | 8,496      |                 | 30,009     |
| Miscellaneous merchandise.... |                   | 39,563     |       | 3,367     |                        | 41,584     |       | 2,000      |                 | 86,514     |
| Shingles, woodenware, etc.... |                   |            |       | 54        |                        |            |       |            |                 | 54         |
| Sawed lumber.....Ft. B.M.     |                   | 12,841,552 |       | 1,625,855 |                        | 17,871,652 |       | 14,733,677 |                 | 47,072,736 |
| Square lumber.....Cub. ft.    |                   | 572,000    |       | 660,000   |                        |            |       | 84,200     |                 | 1,316,200  |
| Firewood.....Cords            |                   |            |       | 210       |                        | 9          |       |            |                 | 219        |
| Staves.....No.                |                   |            |       | 641,000   |                        |            |       |            |                 | 641,000    |
|                               | No.               | Tonnage.   | No.   | Tonnage.  | No.                    | Tonnage.   | No.   | Tonnage.   | No.             | Tonnage.   |
|                               | 228               | 157,539    | 55    | 39,375    | 205                    | 187,748    | 42    | 15,918     | 530             | 400,580    |
| 1904.                         |                   | Tons.      |       | Tons.     |                        | Tons.      |       | Tons.      |                 | Tons.      |
| Wheat.....                    |                   | 116,794    |       | 33,302    |                        | 14,269     |       |            |                 | 164,365    |
| Corn.....                     |                   | 12,768     |       | 7,814     |                        | 95,862     |       |            |                 | 116,444    |
| Barley.....                   |                   | 2,619      |       | 824       |                        | 23,728     |       |            |                 | 27,171     |
| Oats.....                     |                   |            |       |           |                        | 16,261     |       |            |                 | 16,261     |
| Pease.....                    |                   |            |       |           |                        | 3          |       |            |                 | 3          |
| Rye.....                      |                   | 1,925      |       | 7,187     |                        | 17,133     |       | 7,668      |                 | 33,913     |
| Coal.....                     |                   | 34,907     |       |           |                        | 1,925      |       |            |                 | 36,832     |
| Miscellaneous merchandise.... |                   | 29,567     |       |           |                        | 60,548     |       |            |                 | 90,115     |
| Shingles, woodenware, etc.... |                   |            |       |           |                        |            |       |            |                 |            |
| Sawed lumber.....Ft. B.M.     |                   | 15,077,382 |       | 854,811   |                        | 32,754,541 |       | 9,572,655  |                 | 58,259,389 |
| Square timber.....Cub. ft.    |                   | 944,508    |       | 744,000   |                        |            |       | 149,000    |                 | 1,837,508  |
| Firewood.....Cords            |                   |            |       |           |                        | 717        |       |            |                 | 717        |
| Staves.....No.                |                   | 634,000    |       |           |                        |            |       |            |                 | 634,000    |
|                               | No.               | Tonnage.   | No.   | Tonnage.  | No.                    | Tonnage.   | No.   | Tonnage.   | No.             | Tonnage.   |
|                               | 252               | 182,373    | 91    | 48,692    | 319                    | 286,656    | 64    | 29,120     | 726             | 546,841    |
| 1905.                         |                   | Tons.      |       | Tons.     |                        | Tons.      |       | Tons.      |                 | Tons.      |
| Wheat.....                    |                   | 188,706    |       | 18,575    |                        | 28,757     |       | 2,512      |                 | 238,550    |
| Corn.....                     |                   | 6,385      |       | 6,636     |                        | 163,374    |       | 4,526      |                 | 180,921    |
| Barley.....                   |                   | 6,870      |       | 1,451     |                        | 47,111     |       |            |                 | 55,432     |
| Oats.....                     |                   | 8,225      |       | 2,570     |                        | 21,535     |       | 3,742      |                 | 36,072     |
| Pease.....                    |                   |            |       |           |                        | 76         |       |            |                 | 76         |
| Rye.....                      |                   |            |       |           |                        | 1,171      |       |            |                 | 1,711      |
| Coal.....                     |                   | 18,756     |       | 35,324    |                        | 28,330     |       | 8,678      |                 | 91,088     |
| Iron ore.....                 |                   | 14,358     |       | 8,023     |                        |            |       |            |                 | 22,381     |
| Merchandise.....              |                   | 29,375     |       | 7,485     |                        | 74,975     |       | 3,126      |                 | 114,961    |
| Shingles, woodenware, etc.... |                   |            |       | 2,748,941 |                        | 2,325      |       |            |                 | 2,325      |
| Sawed lumber.....Ft. B.M.     |                   | 2,867,147  |       |           |                        | 38,290,831 |       | 12,479,689 |                 | 54,589,200 |
| Square timber.....Cub. ft.    |                   | 355,000    |       | 951,524   |                        |            |       |            |                 | 538,000    |
| Firewood.....Cords            |                   |            |       | 183,000   |                        | 900        |       |            |                 | 900        |



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D.—STATEMENT showing the Quantity of Through Freight passed down the Welland canal in Canadian and United States vessels, etc.—Continued.

| Articles.                      | Canadian Vessels. |                | American Vessels. |                | Total.          |
|--------------------------------|-------------------|----------------|-------------------|----------------|-----------------|
|                                | Steam.            |                | Sail.             |                | Steam and Sail. |
|                                | No.   Tonnage.    | No.   Tonnage. | No.   Tonnage.    | No.   Tonnage. | No.   Tonnage.  |
|                                | 328   238,690     | 121   66,355   | 305   310,622     | 43   15,758    | 797   631,425   |
| 1906.                          | Tons.             | Tons.          | Tons.             | Tons.          | Tons.           |
| Wheat.....                     | 250,493           | 34,355         | 35,578            |                | 320,436         |
| Corn.....                      | 8,177             |                | 202,250           | 1,378          | 49,306          |
| Barley.....                    | 8,546             | 5,046          | 17,854            |                | 31,446          |
| Oats.....                      | 21,900            | 16,083         | 11,323            |                | 49,306          |
| Pease.....                     |                   |                | 11                |                | 11              |
| Rye.....                       |                   | 5              | 1,406             |                | 1,411           |
| Coal.....                      | 30,455            | 47,242         | 24,190            | 9,356          | 111,243         |
| Iron ore.....                  | 5,862             |                |                   |                | 5,862           |
| Merchandise.....               | 35,383            | 7,009          | 110,263           | 50             | 152,705         |
| Shingles, woodenware, etc..... | 16                | 37             | 851               |                | 904             |
| Sawed lumber..... Ft. B.M.     | 3,471,514         | 235,624        | 25,711,196        | 10,789,755     | 40,188,089      |
| Square timber..... Cub. ft.    | 375,000           | 200,000        |                   |                | 575,000         |
| Firewood..... Cords            | 110               | 18             | 1,093             |                | 1,221           |
| Staves..... No.                |                   |                | 300,000           |                | 300,000         |
|                                | No.   Tonnage.    | No.   Tonnage. | No.   Tonnage.    | No.   Tonnage. | No.   Tonnage.  |
|                                | 375   290,509     | 148   81,070   | 408   397,616     | 76   36,921    | 1007   806,116  |
| 1907.                          | Tons.             | Tons.          | Tons.             | Tons.          | Tons.           |
| Wheat.....                     | 294,298           | 50,808         | 130,818           | 4,429          | 480,303         |
| Corn.....                      | 6,713             | 514            | 259,895           | 4,571          | 271,693         |
| Barley.....                    | 8,726             | 468            | 4,046             |                | 13,240          |
| Oats.....                      | 49,689            | 16,647         | 7,033             |                | 73,369          |
| Pease.....                     |                   |                | 25                |                | 25              |
| Rye.....                       |                   |                | 2,270             |                | 2,270           |
| Coal.....                      | 31,506            | 57,373         | 50,183            | 14,493         | 143,555         |
| Iron ore.....                  | 12,040            | 8,950          |                   |                | 20,990          |
| Merchandise.....               | 21,545            | 9,436          | 5,231             | 6,235          | 42,447          |
| Shingles, woodenware, etc..... |                   |                | 2,222             |                | 2,222           |
| Sawed lumber..... Ft. B.M.     |                   |                | 14,395,124        | 11,201,446     | 25,596,570      |
| Square timber..... Cub. ft.    | 558,090           | 323,000        |                   |                | 881,090         |
| Firewood..... Cords            |                   |                | 660               |                | 660             |
|                                | No.   Tonnage.    | No.   Tonnage. | No.   Tonnage.    | No.   Tonnage. | No.   Tonnage.  |
|                                | 567   432,623     | 149   64,034   | 428   319,030     | 36   19,866    | 1180   835,553  |
| 1908.                          | Tons.             | Tons.          | Tons.             | Tons.          | Tons.           |
| Wheat.....                     | 505,151           | 39,001         | 183,011           | 3,498          | 730,751         |
| Corn.....                      | 2,405             |                | 124,997           |                | 127,402         |
| Barley.....                    | 19,775            | 1,133          | 10,264            |                | 31,172          |
| Oats.....                      | 30,091            | 643            | 2,689             |                | 33,423          |
| Pease.....                     |                   |                | 40                |                | 40              |
| Rye.....                       | 742               |                | 5,925             |                | 6,667           |
| Coal.....                      | 33,733            | 42,656         | 57,448            | 8,344          | 148,181         |
| Merchandise.....               | 26,815            | 14,783         | 14,410            | 13,686         | 69,694          |
| Firewood..... Cords            |                   | 70             | 1,173             |                | 1,243           |
| Sawed lumber..... Ft. B.M.     |                   |                | 17,572,070        | 6,578,545      | 24,150,615      |
| Square timber..... Cub. ft.    | 221,300           | 313,000        |                   |                | 534,300         |



## SESSIONAL PAPER No. 20a

D.—STATEMENT showing the Quantity of Through Freight passed down the Welland canal in Canadian and United States vessels, etc.—*Continued.*

| Articles.          | Canadian Vessels. |          |         |          | American Vessels. |          |        |          | Total.          |           |
|--------------------|-------------------|----------|---------|----------|-------------------|----------|--------|----------|-----------------|-----------|
|                    | Steam.            |          | Sail.   |          | Steam.            |          | Sail.  |          | Steam and Sail. |           |
|                    | No.               | Tonnage. | No.     | Tonnage. | No.               | Tonnage. | No.    | Tonnage. | No.             | Tonnage.  |
|                    | 555               | 486,406  | 136     | 71,034   | 323               | 324,576  | 26     | 17,317   | 1040            | 899,333   |
| 1909.              | Tons.             |          | Tons.   |          | Tons.             |          | Tons.  |          | Tons.           |           |
| Wheat.....         | 415,208           |          | 34,903  |          | 133,172           |          |        |          | 583,283         |           |
| Corn.....          | 6,694             |          |         |          | 134,208           |          |        |          | 140,902         |           |
| Barley.....        | 17,943            |          | 360     |          | 4,848             |          |        |          | 23,151          |           |
| Oats.....          | 70,392            |          | 4,743   |          |                   |          |        |          | 75,135          |           |
| Pease.....         |                   |          |         |          | 63                |          |        |          | 63              |           |
| Rye.....           | 33                |          |         |          |                   |          |        |          | 33              |           |
| Coal.....          | 160,475           |          | 53,681  |          | 21,097            |          | 630    |          | 235,883         |           |
| Merchandise.....   | 52,994            |          | 14,732  |          | 12,232            |          | 16,498 |          | 96,506          |           |
| Sawed lumber.....  |                   |          |         |          | 31,643            |          | 10,214 |          | 41,857          |           |
| Square timber..... | 3,450             |          | 7,840   |          | 125               |          | 1,475  |          | 12,890          |           |
|                    | No.               | Tonnage. | No.     | Tonnage. | No.               | Tonnage. | No.    | Tonnage. | No.             | Tonnage.  |
|                    | 596               | 599,416  | 142     | 88,963   | 249               | 285,704  | 14     | 13,563   | 1001            | 987,646   |
| 1910.              | Tons.             |          | Tons.   |          | Tons.             |          | Tons.  |          | Tons.           |           |
| Wheat.....         | 481,624           |          | 22,200  |          | 77,040            |          |        |          | 580,864         |           |
| Corn.....          | 15,759            |          |         |          | 214,221           |          |        |          | 229,980         |           |
| Barley.....        | 17,159            |          | 576     |          | 3,840             |          |        |          | 21,575          |           |
| Oats.....          | 135,743           |          |         |          | 490               |          |        |          | 136,233         |           |
| Pease.....         |                   |          |         |          | 123               |          |        |          | 123             |           |
| Rye.....           |                   |          |         |          |                   |          |        |          |                 |           |
| Coal.....          | 216,679           |          | 114,671 |          | 29,646            |          | 894    |          | 361,990         |           |
| Merchandise.....   | 39,149            |          | 15,231  |          | 21,818            |          | 20,466 |          | 96,664          |           |
| Sawed lumber.....  | 3,630             |          | 800     |          | 16,932            |          |        |          | 21,362          |           |
| Square timber..... | 1,930             |          | 5,000   |          | 800               |          |        |          | 7,730           |           |
| Shingles.....      |                   |          |         |          | 525               |          |        |          | 525             |           |
| Unenumerated.....  | 74,434            |          | 1,772   |          | 24,031            |          |        |          | 100,237         |           |
| Total.....         | 986,207           |          | 160,250 |          | 389,466           |          | 21,360 |          | 1,557,283       |           |
|                    | No.               | Tonnage. | No.     | Tonnage. | No.               | Tonnage. | No.    | Tonnage. | No.             | Tonnage.  |
|                    | 640               | 670,037  | 122     | 83,755   | 270               | 304,171  | 48     | 42,830   | 1080            | 1,100,793 |
| 1911.              | Tons.             |          | Tons.   |          | Tons.             |          | Tons.  |          | Tons.           |           |
| Wheat.....         | 483,984           |          | 24,826  |          | 49,330            |          |        |          | 558,140         |           |
| Corn.....          | 29,978            |          | 11,368  |          | 232,586           |          |        |          | 273,932         |           |
| Barley.....        | 14,382            |          | 240     |          |                   |          |        |          | 14,622          |           |
| Oats.....          | 162,455           |          | 878     |          |                   |          |        |          | 163,333         |           |
| Pease.....         |                   |          |         |          |                   |          |        |          |                 |           |
| Rye.....           | 112               |          |         |          |                   |          |        |          | 112             |           |
| Coal.....          | 230,809           |          | 79,311  |          | 40,109            |          | 22,489 |          | 372,718         |           |
| Merchandise.....   | 45,838            |          | 19,325  |          | 45,881            |          | 34,449 |          | 145,493         |           |
| Sawed lumber.....  | 300               |          |         |          | 25,361            |          | 9,020  |          | 34,681          |           |
| Square timber..... | 3,260             |          | 4,500   |          | 2,277             |          |        |          | 10,037          |           |
| Shingles.....      |                   |          |         |          | 60                |          |        |          | 60              |           |
| Unenumerated.....  | 95,017            |          |         |          | 14,386            |          |        |          | 109,403         |           |
| Total.....         | 1,066,135         |          | 140,448 |          | 409,990           |          | 65,958 |          | 1,682,513       |           |



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D.—STATEMENT showing the Quantity of Through Freight passed down the Welland canal in Canadian and United States vessels, etc.—*Concluded.*

| Articles.          | Canadian Vessels. |           |       |          | United States Vessels. |          |       |          | Total.           |
|--------------------|-------------------|-----------|-------|----------|------------------------|----------|-------|----------|------------------|
|                    | Steam.            |           | Sail. |          | Steam.                 |          | Sail. |          | Steam and Sail.  |
|                    | No.               | Tonnage.  | No.   | Tonnage. | No.                    | Tonnage. | No.   | Tonnage. | No.   Tonnage.   |
|                    | 774               | 790,044   | 152   | 95,202   | 450                    | 427,226  | 52    | 33,102   | 1428   1,345,574 |
| 1912.              |                   | Tons.     |       | Tons.    |                        | Tons.    |       | Tons.    |                  |
| Wheat.....         |                   | 603,854   |       | 78,794   |                        | 111,284  |       |          | 793,932          |
| Corn.....          |                   | 536       |       | 2,181    |                        | 118,616  |       |          | 121,333          |
| Barley.....        |                   | 22,022    |       | 353      |                        | 2,866    |       |          | 25,241           |
| Oats.....          |                   | 170,446   |       | 3,269    |                        | 11,831   |       |          | 185,546          |
| Pease.....         |                   |           |       |          |                        | 150      |       |          | 150              |
| Rye.....           |                   |           |       |          |                        | 714      |       |          | 714              |
| Coal.....          |                   | 331,536   |       | 44,212   |                        | 154,653  |       | 3,800    | 534,201          |
| Merchandise.....   |                   | 48,659    |       | 17,602   |                        | 47,836   |       | 32,340   | 146,437          |
| Sawed lumber.....  |                   |           |       |          |                        | 22,689   |       | 15,361   | 38,050           |
| Square timber..... |                   | 9,000     |       | 8,660    |                        | 1,409    |       |          | 19,069           |
| Shingles.....      |                   |           |       |          |                        | 250      |       |          | 250              |
| Unenumerated.....  |                   | 73,387    |       | 1,186    |                        | 69,367   |       |          | 143,940          |
| Total.....         |                   | 1,259,440 |       | 156,257  |                        | 541,665  |       | 51,501   | 2,088,863        |
|                    | No.               | Tonnage.  | No.   | Tonnage. | No.                    | Tonnage. | No.   | Tonnage. | No.   Tonnage.   |
|                    | 1043              | 1,081,973 | 148   | 104,194  | 375                    | 386,284  | 28    | 18,908   | 1594   1,590,459 |
| 1913.              |                   | Tons.     |       | Tons.    |                        | Tons.    |       | Tons.    |                  |
| Wheat.....         |                   | 761,418   |       | 87,153   |                        | 154,768  |       |          | 1,003,339        |
| Corn.....          |                   | 1,549     |       |          |                        | 142,805  |       |          | 144,354          |
| Barley.....        |                   | 82,241    |       | 2,448    |                        | 12,200   |       |          | 96,889           |
| Oats.....          |                   | 188,442   |       | 1,937    |                        | 9,415    |       |          | 199,794          |
| Pease.....         |                   |           |       |          |                        |          |       |          |                  |
| Rye.....           |                   | 3,136     |       |          |                        | 3,731    |       |          | 6,867            |
| Coal.....          |                   | 498,269   |       | 59,145   |                        | 107,946  |       | 1,735    | 667,095          |
| Merchandise.....   |                   | 59,375    |       | 18,701   |                        | 28,825   |       | 21,008   | 127,909          |
| Sawed lumber.....  |                   | 1,500     |       |          |                        | 19,200   |       | 3,736    | 24,436           |
| Square timber..... |                   | 4,636     |       | 4,004    |                        | 1,040    |       |          | 9,680            |
| Shingles.....      |                   |           |       |          |                        |          |       |          |                  |
| Unenumerated.....  |                   | 183,957   |       | 9,059    |                        | 76,613   |       | 3,550    | 273,179          |
| Total.....         |                   | 1,784,523 |       | 182,447  |                        | 556,543  |       | 30,029   | 2,553,531        |
|                    | No.               | Tonnage.  | No.   | Tonnage. | No.                    | Tonnage. | No.   | Tonnage. | No.   Tonnage.   |
|                    | 1301              | 1,345,319 | 154   | 93,099   | 357                    | 353,547  | 25    | 7,279    | 1837   1,799,244 |
| 1914.              |                   | Tons.     |       | Tons.    |                        | Tons.    |       | Tons.    |                  |
| Wheat.....         |                   | 1,268,410 |       | 101,833  |                        | 189,666  |       |          | 1,559,909        |
| Corn.....          |                   | 4,973     |       | 1,422    |                        | 105,738  |       |          | 112,133          |
| Barley.....        |                   | 80,488    |       | 4,423    |                        | 4,711    |       |          | 89,622           |
| Oats.....          |                   | 210,795   |       | 3,699    |                        | 10,982   |       |          | 225,476          |
| Pease.....         |                   |           |       |          |                        |          |       |          |                  |
| Rye.....           |                   | 1,114     |       |          |                        | 9,106    |       |          | 10,220           |
| Coal.....          |                   | 531,240   |       | 32,288   |                        | 132,215  |       | 901      | 696,544          |
| Merchandise.....   |                   | 61,135    |       | 16,751   |                        | 14,987   |       |          | 92,873           |
| Sawed lumber.....  |                   | 450       |       |          |                        | 17,285   |       | 1,670    | 19,405           |
| Square timber..... |                   | 4,846     |       |          |                        | 1,397    |       |          | 6,243            |
| Shingles.....      |                   | 175       |       |          |                        |          |       |          | 175              |
| Unenumerated.....  |                   | 102,804   |       |          |                        | 20,936   |       | 400      | 124,140          |
| Total.....         |                   | 2,266,430 |       | 160,416  |                        | 507,023  |       | 2,871    | 2,936,740        |



SESSIONAL PAPER No. 20a

WELLAND CANAL THROUGH FREIGHT—RECAPITULATION.

WELLAND CANAL—WESTBOUND FREIGHT.

The total quantity of Through Freight passed up the Welland canal in Canadian and United States vessels during the Season of Navigation in 1914 is as follows:—

| Summary.   | Tons.   | Tons.   |
|--|---------|---------|
| In Canadian steam vessels.....   | 444,621 |         |
| “ sail vessels.....  | 6,828   |         |
| Total quantity in Canadian vessels.....  |         | 451,449 |
| In United States steam vessels.....  | 336,910 |         |
| “ sail vessels.....  |         |         |
| Total in United States vessels.....  |         | 336,910 |
| Grand total freight passed up the Welland canal in Canadian and United States vessels..... |         | 788,359 |

STATEMENT of the Quantity of Through Freight passing up and down the Welland canal during the Season of Navigation in 1914.

| Summary.   | Tons.               | Tons.             |
|--|---------------------|-------------------|
| In Canadian steam vessels up.....                | 444,621             |                   |
| “ “ down.....                                    | 2,266,430           |                   |
| Total in Canadian steam vessels.....             |                     | 2,711,051         |
| In Canadian sail vessels up .....                | 6,828               |                   |
| “ “ down.....                                    | 160,416             |                   |
| Total in Canadian sail vessels.....              |                     | 167,244           |
| Total quantity in Canadian vessels.....          |                     | 2,878,295         |
| In United States steam vessels up.....           | 336,910             |                   |
| “ “ down.....                                    | 507,023             |                   |
| Total in United States steam vessels.....        |                     | 843,933           |
| In United States sail vessels up.....            |                     |                   |
| “ “ down.....                                    | 2,871               |                   |
| Total in United States sail vessels.....         |                     | 2,871             |
| Total quantity in United States vessels.....     |                     | 846,804           |
| Total in Canadian and United States vessels..... |                     | 3,725,099         |
|  | Down or East bound. | Up or West bound. |
| In Canadian vessels.....                         | 2,426,846           | 451,449           |
| In United States vessels.....                    | 509,894             | 336,910           |
| Total.....                                       | 2,936,740           | 788,359           |



17.—STATEMENT showing the Quantity of Freight passed Eastward, from Lake Erie, through the whole length of the Welland and St. Lawrence canals, to Montreal, during the Seasons of Navigation 1902 to 1914.

| Articles.                                   | 1902.   | 1903.   | 1904.   | 1905.   | 1906.   | 1907.   | 1908.   | 1909.   | 1910.   | 1911.   | 1912.     | 1913.     | 1914.     |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|-----------|
| <i>Class 3.</i>                             | Tons.   | Tons.   | Tons.   | Tons.   | Tons.   | Tons.   | Tons.   | Tons.   | Tons.   | Tons.   | Tons.     | Tons.     | Tons.     |
| Cement and water lime                       |         |         | 35      |         |         |         |         | 5,652   | 484     |         |           |           |           |
| Clay, lime and sand                         |         |         |         | 22      |         |         |         |         |         |         |           | 270       |           |
| Iron, railway                               | 50      |         | 8,170   | 10      |         |         |         |         |         |         |           |           |           |
| “ pig                                       |         |         |         | 384     | 209     | 124     | 553     | 12,689  | 7,154   | 1,901   | 28,996    | 93        | 430       |
| “ all other                                 | 5,785   | 2,542   | 1,651   | 48      |         |         |         |         |         | 34,540  |           | 5,402     | 150       |
| Steel                                       |         |         | 16      |         |         |         |         |         |         |         |           |           |           |
| Stone, for cutting                          |         |         |         |         |         |         |         |         |         |         |           |           |           |
| Apples                                      |         |         |         |         |         | 9,936   |         |         |         |         |           |           |           |
| Barley                                      |         | 2,206   | 9,697   | 43,607  | 21,196  | 105,984 | 24,318  | 19,143  | 20,000  | 14,853  | 20,572    | 60,854    | 56,784    |
| Corn  | 1,719   | 123,864 | 55,021  | 84,204  | 55,559  |         | 10,454  | 17,137  | 77,612  | 134,239 | 7,345     | 9,344     | 6,031     |
| Flaxseed                                    |         | 3,643   | 212     | 15,694  | 80,570  | 49,159  | 27,500  | 19,634  | 6,607   | 11,696  | 15,413    | 117,548   | 4,285     |
| Flour                                       | 6,755   | 16,151  | 24,662  | 14,574  | 9,174   | 3,730   | 5,028   | 21,905  | 27,081  | 44,588  | 38,026    | 34,152    | 60,723    |
| Meal, all kinds                             |         | 348     | 57      | 270     | 60      |         | 156     |         | 10,323  | 3,967   |           |           |           |
| Oats  | 1,442   | 2,438   |         | 21,404  | 37,164  | 66,941  | 28,081  | 65,624  | 129,900 | 147,180 | 164,581   | 72,733    | 97,361    |
| Oil cake                                    |         | 462     | 7,846   | 9,229   |         |         |         |         |         |         |           |           |           |
| Pease                                       |         | 63      |         |         |         |         |         | 30      |         | 20      | 10        |           |           |
| Rye   | 4,079   | 4,260   |         | 1,711   | 1,405   | 2,266   | 6,662   | 120     |         |         | 714       | 4,567     | 9,385     |
| Salt  |         | 132     | 615     | 168     | 75      | 143     | 419     |         |         |         | 931       | 686       | 100       |
| Seed, all kinds                             |         |         |         |         |         | 20      |         |         |         |         |           |           |           |
| Hay, pressed                                |         |         |         |         |         |         |         |         |         |         |           |           |           |
| Tobacco, raw                                |         |         |         |         |         |         |         |         |         |         |           |           |           |
| Wheat                                       | 200,975 | 226,746 | 133,528 | 190,505 | 289,611 | 450,446 | 686,626 | 550,775 | 562,149 | 541,174 | 768,633   | 763,851   | 1,184,645 |
| All other agricultural products, vegetables |         |         |         |         |         |         |         | 5,876   |         |         |           |           | 308       |
| Hides, skins, horns and hoofs               |         |         | 10      |         |         |         |         |         |         |         |           |           |           |
| Horses                                      |         |         |         |         | 2       |         |         |         |         |         |           |           |           |
| Lard and lard oil                           |         |         |         | 2,847   | 4,810   |         |         |         |         |         |           |           |           |
| Meats, all kinds                            |         |         |         |         |         |         |         |         |         |         | 41        |           |           |
| Pork  |         |         |         |         |         |         | 524     |         |         |         |           |           |           |
| Tallow                                      |         | 3       |         | 53      |         |         |         |         |         |         |           |           |           |
| All other agricultural products, animal     |         |         | 1       |         |         |         |         | 366     |         |         |           |           |           |
| Total, class 3                              | 220,805 | 382,858 | 241,522 | 384,727 | 499,895 | 688,749 | 790,321 | 718,951 | 841,310 | 934,158 | 1,045,262 | 1,069,500 | 1,420,202 |

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G.—STATEMENT showing the Quantity of Freight passed Westward from Montreal, through the whole length of the St. Lawrence and Welland canals to Lake Erie, during the Seasons of Navigation in 1902, 1903, 1904, 1905, 1906, 1907, 1909, 1910, 1911, 1912, 1913 and 1914.

| Articles.   | 1902.  | 1903.  | 1904. | 1905. | 1906.  | 1907.  | 1909.  | 1910.  | 1911.  | 1912.   | 1913.  | 1914.  |
|---|--------|--------|-------|-------|--------|--------|--------|--------|--------|---------|--------|--------|
| <i>Class 3.</i>                                       | Tons.  | Tons.  | Tons. | Tons. | Tons.  | Tons.  | Tons.  | Tons.  | Tons.  | Tons.   | Tons.  | Tons.  |
| Bricks.....   | 22     | 80     | 115   | 132   |        | 556    |        |        |        |         |        |        |
| Brimstone.....  | 20     | 23     | 12    |       |        |        |        |        |        |         |        |        |
| Cement and water lime.....                            | 178    | 3,924  | 39    | 181   | 88     | 13     | 400    | 17,565 | 8,625  | 40,074  | 36,890 | 18,000 |
| Clay, lime and sand.....                              | 1      | 181    |       |       |        | 100    |        |        |        |         |        |        |
| Cotton, raw.....                                      |        | 23     |       |       |        |        |        |        |        |         |        |        |
| Fish.....   |        | 8      | 4     |       |        | 39     |        |        |        |         |        |        |
| Gypsum.....   |        |        |       |       |        |        |        |        |        |         |        |        |
| Iron, railway.....                                    | 11,735 | 39,641 | 283   | 126   | 7,289  | 4,119  |        |        |        |         |        |        |
| “ pig.....  | 558    | 273    |       | 312   | 680    | 7,655  | 7,231  | 2,060  | 2,300  | 2,598   | 675    | 7,268  |
| “ all other.....                                      | 2,904  | 5,845  | 3,782 | 3,633 | 8,235  | 6,987  |        | 540    |        |         |        |        |
| Salt.....   | 4      | 87     | 99    | 150   | 17     |        |        |        |        |         |        |        |
| Steel.....  | 11     | 332    | 58    | 192   | 111    | 2,561  | 35,153 |        | 22,352 | 66,544  | 49,692 | 10,602 |
| Stone for cutting.....                                |        |        | 41    |       |        |        |        |        |        |         |        |        |
| Flour.....  |        |        |       | 18    |        |        |        |        |        |         |        |        |
| Hay.....  |        |        |       |       |        | 30     | 255    |        |        |         |        |        |
| Meals.....  |        | 17     | 25    |       |        |        |        | 1,113  |        |         |        |        |
| Oats.....   |        |        |       |       |        |        |        |        |        |         |        |        |
| Potatoes.....   |        |        |       |       |        |        |        |        |        |         |        |        |
| Seeds, all kinds.....                                 | 58     | 325    | 164   | 35    | 17     |        |        |        |        |         |        |        |
| Tobacco, raw.....                                     | 1      | 2      |       |       |        |        |        |        |        |         |        |        |
| Agricultural products, not enumerated, vegetable..... | 1      |        |       | 127   |        |        |        |        |        |         |        |        |
| Hides and skins.....                                  | 16     | 6      |       |       |        |        |        |        |        |         |        |        |
| Horses.....   |        |        |       |       |        |        |        |        |        |         |        |        |
| Lard and lard oil.....                                | 11     |        |       | 28    | 20     | 1      |        |        |        |         |        |        |
| Meats, other than pork.....                           |        | 1      | 25    |       |        | 15     |        |        |        |         |        |        |
| Pork.....   |        |        |       |       |        |        |        |        |        |         |        |        |
| Wool.....   |        |        |       |       |        |        |        |        | 150    | 150     | 25     | 164    |
| All other articles not enumerated.....                |        |        |       |       |        |        |        |        |        |         |        |        |
| Total, class 3.....                                   | 15,520 | 50,768 | 4,647 | 4,934 | 16,457 | 22,076 | 43,039 | 21,278 | 34,427 | 109,366 | 87,282 | 36,034 |







II.—STATEMENT showing the Quantity of Freight passed Eastward and Westward through the Welland canal from United States Ports to United States Ports, during the Seasons of Navigation from 1902 to 1914, inclusive.

| Articles.                             |    | 1902.   | 1903.   | 1904.   | 1905.   | 1906.   | 1907.   | 1908.   | 1909.   | 1910.   | 1911.   | 1912.   | 1913.   | 1914.   |
|---------------------------------------|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Class 3.                              |    | Tons.   | Tons.   | Tons.   | Tons.   | Tons.   | Tons.   | Tons.   | Tons.   | Tons.   | Tons.   | Tons.   | Tons.   | Tons.   |
| Bricks.....                           |    |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Cement and water lime.....            |    |         |         |         |         |         |         |         |         | 2,000   |         |         | 11,060  |         |
| Fish.....                             |    |         |         |         |         |         | 20      |         |         |         | 91      |         |         |         |
| Iron, railway.....                    |    |         |         |         |         |         |         |         |         |         |         |         |         |         |
| " all other.....                      | 30 |         |         |         | 1       | 27      | 30      |         |         |         | 1,863   | 300     | 505     |         |
| Salt.....                             |    |         |         |         |         |         |         |         |         |         |         |         | 238     |         |
| Steel.....                            |    |         |         |         |         | 2       | 509     | 9,086   |         |         |         |         |         |         |
| Stone for cutting.....                |    |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Apples.....                           |    |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Barley.....                           |    | 7,418   | 11,433  | 16,621  | 9,197   | 9,266   | 2,812   | 7,148   | 4,224   | 3,840   |         | 2,160   |         |         |
| Corn.....                             |    | 66,111  | 108,917 | 60,964  | 93,622  | 135,240 | 124,474 | 99,830  | 100,967 | 126,938 | 116,705 | 91,254  | 114,662 | 85,700  |
| Flour.....                            |    | 13,785  | 6,082   | 8,556   | 24,054  | 15,215  | 18,898  | 17,694  |         | 11,859  | 2,852   | 9,878   | 11,967  | 8,580   |
| Hay, pressed.....                     |    |         |         |         | 200     |         |         |         |         |         |         |         |         |         |
| Meal, all kinds.....                  |    | 12,675  | 13,456  | 13,076  | 9,606   | 10,668  | 21,976  | 21,353  |         | 9,621   | 7,565   | 12,569  | 8,685   | 10,278  |
| Marble.....                           |    |         |         |         | 87      |         |         |         |         |         |         |         |         |         |
| Nails.....                            |    |         |         |         | 1       |         |         |         |         |         |         |         |         |         |
| Oil cake.....                         |    | 110     | 740     | 16,497  | 228     |         | 114     |         |         |         |         |         |         |         |
| Oats.....                             |    | 10,006  | 6,112   | 3       | 10,892  | 11,323  | 4,741   | 2,070   |         |         |         | 1,400   | 7,407   | 5,219   |
| Pease.....                            |    |         | 22      |         | 76      | 11      | 25      | 40      | 63      | 123     |         | 150     |         |         |
| Potatoes.....                         |    |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Rye.....                              |    |         | 4,174   |         |         |         | 2       | 2       |         |         |         |         |         |         |
| Flax seed.....                        |    |         | 1,594   |         |         | 756     |         |         | 15,452  |         |         |         |         |         |
| Seeds, all kinds.....                 | 10 |         | 27      |         | 43      | 3       | 17      |         |         |         |         |         |         |         |
| Tobacco.....                          |    |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Wheat.....                            |    | 32,639  | 15,436  | 14,269  | 15,483  | 13,410  | 21,802  | 24,651  | 17,940  | 10,717  | 4,950   | 15,911  | 20,258  | 32,657  |
| Agricultural products, vegetable..... |    |         | 1       |         | 1       |         | 7       |         | 22,620  |         | 19      | 37      |         |         |
| Hides and skins, etc.....             |    |         |         |         |         |         |         | 21      | 315     | 233     |         |         |         |         |
| Horses.....                           |    |         | 2       |         |         |         |         |         |         |         |         |         |         |         |
| Lard and lard oil, etc.....           |    | 2,413   |         |         |         | 22      | 86      |         |         |         |         |         |         |         |
| Meats, other than pork.....           |    |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Pork.....                             |    | 632     | 152     | 379     | 273     | 268     | 429     | 190     |         |         |         |         |         |         |
| Sheep.....                            |    |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Tallow.....                           |    |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Wool.....                             |    | 752     | 482     | 134     | 21      | 89      | 30      |         | 157     | 233     | 9       |         |         |         |
| Total, class 3.....                   |    | 146,581 | 168,720 | 130,301 | 163,301 | 196,301 | 196,061 | 182,085 | 161,738 | 164,654 | 134,054 | 133,659 | 184,782 | 142,425 |

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L.—STATEMENT of the quantity of Grain Transhipped to the following Ports for the season of 1914.

| Ports.          | Wheat.    | Oats.     | Barley.  | Corn.    | Other grain. | Total.    | Total.  |
|-----------------|-----------|-----------|----------|----------|--------------|-----------|---------|
|                 | Bushels.  | Bushels.  | Bushels. | Bushels. | Bushels.     | Bushels.  | Tons.   |
| Kingston.....   | 3,955,867 | 1,795,294 | 120,460  | 98,713   | 83,000       | 6,053,334 | 157,175 |
| Prescott.....   |           |           |          |          |              |           |         |
| Ogdensburg....  | 401,734   |           |          |          |              | 401,734   | 12,052  |
| Total bushels.. | 4,357,601 | 1,795,294 | 120,460  | 98,713   | 83,000       | 6,455,068 |         |
| Total tons...   | 130,728   | 30,520    | 2,891    | 2,764    | 2,324        |           | 169,227 |

M.—The quantity of Coal passed through the Welland canal during a series of years from 1885 to 1914 inclusive, is as follows:—

| Years.    | From Canadian Ports to Canadian Ports. | From Canadian Ports to Canadian Ports. | From United States Ports to United States Ports. |       | From United States Ports to Canadian Ports. |         | Total.  |
|-----------|--|--|--|-------|---|---------|---------|
|           | Up.                                    | Down.                                  | Up.  | Down. | Up.   | Down.   |         |
|           | Tons.                                  | Tons.                                  | Tons.  | Tons. | Tons.                                       | Tons.   | Tons.   |
| 1885..... |  |  | 193,442  | 4,974 | 10,321                                      | 31,350  | 240,087 |
| 1886..... |  |  | 184,564  | 5,400 | 22,187                                      | 49,724  | 261,875 |
| 1887..... |  |  | 81,617   | 1,163 | 26,775                                      | 25,968  | 135,523 |
| 1888..... |  |  | 172,381  | 878   | 17,365                                      | 27,183  | 217,807 |
| 1889..... |  |  | 226,352  | 1,124 | 12,036                                      | 25,931  | 265,443 |
| 1890..... | 80                                     |  | 116,616  | 615   | 17,280                                      | 22,781  | 202,372 |
| 1891..... |  |  | 185,190  | 1,382 | 17,374                                      | 20,698  | 224,644 |
| 1892..... |  |  | 183,244  | 651   | 12,391                                      | 15,330  | 211,616 |
| 1893..... |  |  | 204,704  | 2,123 | 8,325                                       | 17,944  | 233,096 |
| 1894..... |  |  | 187,794  | 727   | 1,269                                       | 13,947  | 203,737 |
| 1895..... | 4                                      |  | 148,887  | 603   | 1,565                                       | 7,807   | 158,866 |
| 1896..... | 20                                     | 210                                    | 206,093  | 1,255 | 4,127                                       | 11,740  | 223,443 |
| 1897..... |  | 4                                      | 165,143  |       | 1,277                                       | 9,799   | 176,225 |
| 1898..... |  |  | 156,055  | 759   | 986   | 4,536   | 162,336 |
| 1899..... |  |  | 86,638   | 2,293 | 525   | 8,276   | 97,732  |
| 1900..... | 8                                      |  | 45,032   | 992   |   | 1,360   | 47,392  |
| 1901..... |  |  | 46,345   | 357   | 456   | 2,322   | 49,480  |
| 1902..... |  |  | 12,410   | 501   | 65  | 51,037  | 64,013  |
| 1903..... | 3                                      |  | 113,076  |       | 4,796                                       | 30,009  | 147,884 |
| 1904..... | 2,919                                  |  | 62,782   | 1,100 | 3,711                                       | 32,813  | 103,325 |
| 1905..... |  |  | 70,118   | 3,346 | 11,436                                      | 37,742  | 172,642 |
| 1906..... | 60                                     |  | 29,123   | 4,400 | 7,161                                       | 106,843 | 147,587 |
| 1907..... | 2,857                                  |  | 110,347  |       | 10,453                                      | 143,555 | 267,212 |
| 1908..... | 4,401                                  |  | 158,351  |       | 5,988                                       | 148,181 | 316,921 |
| 1909..... |  |  | 130,731  | 400   | 11,067                                      | 235,483 | 377,681 |
| 1910..... | 2,045                                  |  | 197,482  | 4,411 | 15,974                                      | 357,579 | 577,491 |
| 1911..... | 731                                    |  | 221,752  | 2,160 | 24,451                                      | 370,558 | 619,682 |
| 1912..... |  |  | 163,461  | 2,958 | 12,034                                      | 531,243 | 709,696 |
| 1913..... |  |  | 235,730  | 1,500 | 42,965                                      | 665,595 | 945,790 |
| 1914..... |  |  | 236,976  |       | 13,107                                      | 699,223 | 949,306 |



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N.—STATEMENT showing the quantity of Coal passed through the whole length of the St. Lawrence canals during the season of 1885 to 1914 inclusive.

| Years.    | Quantity<br>passed up. | Quantity<br>passed down<br>to<br>Montreal. | Total<br>Quantity<br>passed up<br>and down. |
|-----------|------------------------|--|---|
|           | Tons.                  | Tons.                                      | Tons.                                       |
| 1885..... | 5,035                  | 122,829                                    | 127,864                                     |
| 1886..... | 3,301                  | 118,802                                    | 122,103                                     |
| 1887..... | 7,579                  | 121,618                                    | 129,197                                     |
| 1888..... | 8,341                  | 123,050                                    | 131,391                                     |
| 1889..... | 5,360                  | 124,290                                    | 129,650                                     |
| 1890..... | 6,538                  | 135,168                                    | 141,706                                     |
| 1891..... | 7,951                  | 141,701                                    | 149,652                                     |
| 1892..... | 7,543                  | 157,134                                    | 164,677                                     |
| 1893..... | 2,285                  | 147,139                                    | 149,424                                     |
| 1894..... | 16,213                 | 169,552                                    | 185,765                                     |
| 1895..... |                        | 165,151                                    | 165,151                                     |
| 1896..... | 689                    | 161,551                                    | 162,240                                     |
| 1897..... | 40                     | 164,963                                    | 165,003                                     |
| 1898..... | 400                    | 175,609                                    | 176,009                                     |
| 1899..... | 448                    | 201,546                                    | 201,994                                     |
| 1900..... | 10                     | 280,169                                    | 280,179                                     |
| 1901..... | 2,765                  | 298,245                                    | 301,010                                     |
| 1902..... | 9,231                  | 95,702                                     | 104,933                                     |
| 1903..... | 30                     | 290,548                                    | 290,578                                     |
| 1904..... | 9,670                  | 320,973                                    | 330,643                                     |
| 1905..... | 8,518                  | 345,589                                    | 354,107                                     |
| 1906..... | 6,989                  | 313,080                                    | 320,069                                     |
| 1907..... | 1,281                  | 406,978                                    | 408,259                                     |
| 1908..... | 23,939                 | 448,140                                    | 472,079                                     |
| 1909..... | 13,543                 | 469,695                                    | 483,238                                     |
| 1910..... | 7,351                  | 746,926                                    | 754,277                                     |
| 1911..... | 6,230                  | 756,474                                    | 762,704                                     |
| 1912..... | 9,300                  | 903,237                                    | 912,537                                     |
| 1913..... | 3,500                  | 1,225,288                                  | 1,228,788                                   |
| 1914..... | 7,750                  | 1,038,127                                  | 1,045,877                                   |



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O.—STATEMENT showing the quantity of Through Freight passed down the Welland canal, etc.

## RECAPITULATION.

| Articles.           | Quantity passed<br>down to<br>Montreal. | Quantity passed<br>down to<br>Canadian ports<br>between<br>Port Dalhousie<br>and<br>Cornwall. | Quantity passed<br>down to<br>United States<br>Ports on<br>Lake Ontario. |
|---------------------|---|---|--|
| 1903.               | Tons.                                   | Tons.   | Tons.  |
| Barley.....         | 2,206                                   | 1,017   | 11,433   |
| Corn.....           | 116,223                                 | 13,846  | 80,689   |
| Oats.....           | 2,438                                   |   | 5,315  |
| Peas.....           | 63                                      |   | 22   |
| Rye.....            | 4,200                                   |   | 644  |
| Wheat.....          | 226,746                                 | 14,199  | 13,725   |
| Total, grain.....   | †351,936                                | 29,062  | 111,828  |
| Other Articles..... | 38,850                                  | 82,298  | 101,621  |
| Total.....          | 390,786                                 | 111,360   | 213,449  |
| 1904.               |   |   |  |
| Barley.....         | 9,697                                   | 853   | 16,621   |
| Corn.....           | 55,021                                  | 3,950   | 57,473   |
| Oats.....           |   |   | 16,497   |
| Peas.....           |   |   |  |
| Rye.....            |   |   | 3  |
| Wheat.....          | *133,528                                | 18,908  | 11,929   |
| Total, grain.....   | 198,246                                 | 23,711  | 102,523  |
| Other articles..... | 77,031                                  | 80,092  | 138,475  |
| Total.....          | 375,277                                 | 103,803   | 240,998  |
| 1905.               |   |   |  |
| Barley.....         | 43,607                                  | 2,628   | 9,197  |
| Corn.....           | 84,204                                  | 3,095   | 93,622   |
| Oats.....           | 21,404                                  | 3,776   | 10,892   |
| Peas.....           |   |   | 76   |
| Rye.....            | 1,711                                   |   |  |
| Wheat.....          | 190,505                                 | 32,562  | 15,483   |
| Total, grain.....   | *341,431                                | 42,061  | 129,270  |
| Other articles..... | 107,273                                 | 123,225   | 104,747  |
| Total.....          | 448,704                                 | 165,286   | 234,017  |
| 1906.               |   |   |  |
| Barley.....         | 21,196                                  | 984   | 9,266  |
| Corn.....           | 55,559                                  | 15,688  | 140,558  |
| Oats.....           | 37,164                                  | 819   | 11,323   |
| Peas.....           |   | 11  |  |
| Rye.....            | 1,405                                   | 6   |  |
| Wheat.....          | ***289,611                              | 15,843  | 14,972   |
| Total grain.....    | 404,935                                 | 33,351  | 176,119  |
| Other articles..... | 118,224                                 | 176,277   | 59,884   |
| Total.....          | 523,159                                 | 209,628   | 236,003  |



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O.—STATEMENT showing the Quantity of Through Freight passed down the Welland canal, etc.—*Continued.*RECAPITULATION—*Continued.*

| Articles.           | Quantity passed down to Montreal. | Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall. | Quantity passed down to United States Ports on Lake Ontario. |
|---------------------|-----------------------------------|---|--|
| 1907.               | Tons.                             | Tons.   | Tons.  |
| Barley.....         | 9,936                             | 492   | 2,812  |
| Corn.....           | 106,299                           | 31,901  | 133,493  |
| Oats.....           | 67,063                            | 1,565   | 4,741  |
| Peas.....           |                                   |   | 25   |
| Rye.....            | 2,266                             | 2   | 2  |
| Wheat.....          | 450,009                           | 8,072   | 22,222   |
| Total grain ..      | 635,573                           | 42,032  | 163,295  |
| Other articles..... | 153,594                           | 126,423   | 93,127   |
| Total.....          | 789,167                           | 168,455   | 256,422  |
| 1908.               |                                   |   |  |
| Barley.....         | 24,318                            | 3,546   | 3,308  |
| Corn.....           | 10,454                            | 11,489  | 105,459  |
| Oats.....           | 28,081                            | 3,272   | 2,070  |
| Peas.....           |                                   |   | 40   |
| Rye.....            | 6,662                             | 3   | 2  |
| Wheat.....          | †686,626                          | 19,832  | 24,293   |
| Total grain ..      | 756,141                           | 38,142  | 135,172  |
| Other articles..... | 108,785                           | 162,378   | 91,875   |
| Total.....          | 864,926                           | 200,520   | 227,047  |
| 1909.               |                                   |   |  |
| Barley.....         | 19,143                            |   | 4,008  |
| Corn.....           | 17,137                            | 22,798  | 100,967  |
| Oats.....           | 65,624                            | 2,872   | 6,639  |
| Peas.....           | 30                                |   | 33   |
| Rye.....            | 33                                |   |  |
| Wheat.....          | 550,775                           | 14,568  | 17,940   |
| Total grain.....    | 652,742                           | 40,238  | 129,587  |
| Other articles..... | 272,263                           | 113,970   | 126,223  |
| Total.....          | 925,005                           | 154,208   | 255,810  |
| 1910.               |                                   |   |  |
| Barley.....         | 20,000                            |   | 1,575  |
| Corn.....           | 77,612                            | 49,326  | 103,042  |
| Oats.....           | 129,900                           | 6,333   |  |
| Peas.....           |                                   |   | 128  |
| Rye.....            |                                   |   |  |
| Wheat.....          | 562,149                           | 7,998   | 10,717   |
| Total grain.....    | 789,661                           | 63,657  | 115,457  |
| Other articles..... | 380,500                           | 152,325   | 55,683   |
| Total.....          | 1,170,161                         | 215,982   | 171,140  |



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O.- STATEMENT showing the Quantity of Through Freight passed down the Welland canal, etc.—*Concluded.*

RECAPITULATION--*Concluded.*

| Articles.            | Quantity passed<br>down<br>to Montreal. | Quantity passed<br>down to<br>Canadian Ports<br>between<br>Port Dalhousie<br>and<br>Cornwall. | Quantity passed<br>down to<br>United States<br>Ports on<br>Lake Ontario. |
|----------------------|---|---|--|
| 1911.                | Tons.                                   | Tons.   | Tons.  |
| Barley.....          | 14,331                                  | 291   | .....  |
| Corn.....            | 134,239                                 | 22,988  | 116,705  |
| Oats.....            | 147,180                                 | 16,153  | .....  |
| Peas.....            | .....                                   | .....   | .....  |
| Rye.....             | .....                                   | 112   | .....  |
| Wheat.....           | 541,174                                 | 12,016  | 4,950  |
| Total grain .....    | 836,924                                 | 51,560  | 121,655  |
| Other articles.....  | 500,881                                 | 115,721   | 55,790   |
| Total .....          | 1,337,805                               | 167,281   | 177,445  |
| 1912.                |   |   |  |
| Barley.....          | 20,572                                  | 218   | 4,451  |
| Corn.....            | 7,345                                   | 1,372   | 112,616  |
| Oats.....            | 164,581                                 | 20,965  | .....  |
| Peas.....            | 10                                      | 12  | 128  |
| Rye.....             | 714                                     | .....   | .....  |
| Wheat.....           | 768,633                                 | 25,299  | .....  |
| Total grain .....    | 961,855                                 | 47,866  | 117,195  |
| Other articles.....  | 598,108                                 | 214,395   | 69,444   |
| Total .....          | 1,559,963                               | 262,261   | 186,639  |
| 1913.                |   |   |  |
| Barley.....          | 91,856                                  | 5,033   | .....  |
| Corn.....            | 9,344                                   | 20,348  | 114,662  |
| Oats.....            | 173,827                                 | 18,560  | 7,407  |
| Peas.....            | .....                                   | .....   | .....  |
| Rye.....             | 4,567                                   | 2,300   | .....  |
| Wheat.....           | 985,774                                 | 17,565  | .....  |
| Total grain.....     | 1,265,368                               | 63,806  | 122,069  |
| Other articles ..... | 916,254                                 | 135,742   | 50,303   |
| Total .....          | 2,181,622                               | 199,548   | 172,372  |
| 1914.                |   |   |  |
| Barley.....          | 89,622                                  | .....   | .....  |
| Corn.....            | 6,031                                   | 85,700  | 20,402   |
| Oats.....            | 204,166                                 | 5,210   | 16,292   |
| Peas.....            | .....                                   | .....   | .....  |
| Rye.....             | 9,385                                   | .....   | 835  |
| Wheat.....           | 1,527,252                               | .....   | 32,657   |
| Total grain.....     | 1,836,456                               | 90,910  | 70,186   |
| Other articles.....  | 855,855                                 | 46,652  | 36,681   |
| Total.....           | 2,692,311                               | 137,562   | 106,867  |



TABLE 1.—Comparative Statement of Grand Total Freight passed through the undermentioned Canals during the Seasons of Navigation of 1913 and 1914.

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|                       | From Canadian to Canadian Ports. |           | From Canadian to United States Ports. |           | From United States to United States Ports. |            | From United States to Canadian Ports. |           | Tons.     |            | Total Tons. |            | Origin of Cargo. |                |
|-----------------------|----------------------------------|-----------|---------------------------------------|-----------|--|------------|---------------------------------------|-----------|-----------|------------|-------------|------------|------------------|----------------|
|                       | Up.                              | Down.     | Up.                                   | Down.     | Up.  | Down.      | Up.                                   | Down.     | Up.       | Down.      | Up.         | Down.      | Canadian         | United States. |
| 1913.                 |                                  |           |                                       |           |  |            |                                       |           |           |            |             |            |                  |                |
| Sault Ste. Marie..... | 634,118                          | 2,752,099 | 27,372                                | 1,403,129 | 2,373,665                                  | 33,425,887 | 1,859,116                             | 223,938   | 4,894,271 | 37,805,053 | 42,699,324  | 4,954,734  | 37,744,590       |                |
| Welland.....          | 395,667                          | 1,335,059 | 245,735                               | 3,215     | 320,736                                    | 204,597    | 42,965                                | 1,022,740 | 1,005,103 | 2,565,611  | 3,570,714   | 2,093,406  | 1,477,308        |                |
| St. Lawrence.....     | 749,035                          | 1,750,553 | 354,532                               | 34,303    | 126  |            | 432                                   | 1,413,446 | 1,104,125 | 3,198,302  | 4,302,427   | 2,837,019  | 1,465,408        |                |
| Chambly.....          | 8,354                            | 10,096    | 339,113                               |           |  |            |                                       | 198,039   | 347,467   | 208,135    | 555,602     | 358,801    | 196,801          |                |
| St. Peters.....       | 29,486                           | 42,028    |                                       |           |  |            |                                       |           | 29,486    | 42,028     | 71,514      | 71,514     |                  |                |
| Murray.....           | 168,614                          | 4,670     |                                       |           |  |            |                                       | 5,600     | 170,306   | 10,270     | 180,576     | 162,095    | 18,481           |                |
| Ottawa.....           | 51,428                           | 273,652   |                                       | 37,616    |  |            |                                       |           | 54,170    | 311,268    | 365,438     | 358,465    | 6,973            |                |
| Rideau.....           | 80,147                           | 77,464    | 960                                   |           |  |            |                                       | 12,652    | 81,107    | 90,116     | 171,223     | 157,746    | 13,477           |                |
| Trent.....            | 17,541                           | 38,259    |                                       |           |  |            |                                       |           | 17,541    | 38,259     | 55,800      | 55,800     |                  |                |
| St. Andrews.....      | 78,538                           | 2,757     |                                       |           |  |            |                                       |           | 78,538    | 2,757      | 81,295      | 81,295     |                  |                |
| Grand total.....      | 2,212,928                        | 6,286,637 | 967,712                               | 1,478,263 | 2,694,527                                  | 33,630,484 | 1,906,947                             | 2,876,415 | 7,782,114 | 44,271,799 | 52,053,913  | 11,130,875 | 40,923,038       |                |
| 1914.                 |                                  |           |                                       |           |  |            |                                       |           |           |            |             |            |                  |                |
| Sault Ste. Marie..... | 379,703                          | 2,490,510 | 10,174                                | 582,175   | 1,153,050                                  | 21,438,985 | 1,245,894                             | 298,693   | 2,788,821 | 24,810,363 | 27,599,184  | 3,609,747  | 23,989,437       |                |
| Welland.....          | 225,532                          | 1,769,052 | 278,955                               | 450       | 338,455                                    | 170,624    | 13,107                                | 1,064,794 | 856,049   | 3,004,920  | 3,860,969   | 2,013,619  | 1,847,350        |                |
| St. Lawrence.....     | 571,331                          | 1,725,196 | 413,149                               | 91        | 58   | 424        | 1,416                                 | 1,679,828 | 985,954   | 3,405,539  | 4,391,493   | 2,738,649  | 1,652,844        |                |
| Chambly.....          | 4,335                            | 8,492     | 295,258                               |           |  |            |                                       | 128,820   | 299,593   | 137,312    | 436,905     | 308,091    | 128,814          |                |
| St. Peters.....       | 21,793                           | 32,387    |                                       |           |  |            |                                       |           | 21,793    | 32,387     | 54,180      | 54,164     | 16               |                |
| Murray.....           | 76,021                           | 2,938     | 1,490                                 |           |  |            |                                       | 3,458     | 77,511    | 6,396      | 83,907      | 80,946     | 2,961            |                |
| Ottawa.....           | 57,330                           | 238,317   |                                       | 35,559    |  |            | 3,926                                 | 8,633     | 61,256    | 273,876    | 335,132     | 325,059    | 10,073           |                |
| Rideau.....           | 80,867                           | 62,009    | 230                                   |           |  |            |                                       | 175       | 81,097    | 70,642     | 151,739     | 142,203    | 9,536            |                |
| Trent.....            | 15,531                           | 52,009    |                                       |           |  |            |                                       |           | 15,531    | 52,184     | 67,715      | 67,715     |                  |                |
| St. Andrews.....      | 41,681                           | 332       |                                       |           |  |            |                                       |           | 41,681    | 332        | 42,013      | 42,013     |                  |                |
| Grand total.....      | 1,474,124                        | 6,381,242 | 999,256                               | 618,275   | 1,491,563                                  | 21,610,033 | 1,264,343                             | 3,184,401 | 5,229,286 | 31,793,951 | 37,023,237  | 9,382,206  | 27,641,031       |                |



TABLE 2.—Statement showing the Number, Tonnage, and Nationality of Vessels passed through the several canals during the Season of Navigation in 1914.

| Vessels.                          | Total.<br>No.<br>of<br>Trips. | From Canadian<br>to<br>Canadian Ports. |           | From Canadian<br>to<br>United States<br>Ports. |         | From<br>United States.<br>to<br>United States.<br>Ports. |            | From United States<br>to<br>Canadian Ports. |           | Tons.      |            | Total<br>Tons. |
|-----------------------------------|-------------------------------|--|-----------|--|---------|--|------------|---|-----------|------------|------------|----------------|
|                                   |                               | Up.                                    | Down.     | Up.  | Down.   | Up.  | Down.      | Up.   | Down.     | Up.        | Down.      |                |
| Canadian Vessels.                 |                               |  |           |  |         |  |            |   |           |            |            |                |
| Steam and Sail.                   |                               |  |           |  |         |  |            |   |           |            |            |                |
| Sault Ste. Marie.....             | 3,011                         | 1,361,117                              | 1,479,667 | 44,373   | 121,977 | 301  |            | 360,770                                     | 87,087    | 1,766,561  | 1,706,731  | 3,473,292      |
| Welland.....                      | 2,902                         | 1,067,392                              | 1,066,296 | 330,574  | 216     | 4,386  | 2,109      | 24,230                                      | 383,280   | 1,426,582  | 1,451,901  | 2,878,483      |
| St. Lawrence.....                 | 8,982                         | 1,873,438                              | 1,835,688 | 373,968  | 164     |  |            | 164   | 421,813   | 2,247,570  | 2,257,665  | 4,505,235      |
| Chambly.....                      | 346                           | 24,914                                 | 22,889    | 1,979  |         |  |            |   | 2,954     | 26,893     | 25,843     | 52,736         |
| St. Peters.....                   | 1,192                         | 41,763                                 | 38,489    |  |         |  |            |   |           | 41,763     | 38,489     | 80,252         |
| Murray.....                       | 914                           | 112,892                                | 85,173    | 9,446  | 543     |  |            |   | 2,693     | 122,338    | 88,409     | 210,747        |
| Ottawa.....                       | 2,197                         | 187,882                                | 202,760   |  | 1,605   |  |            | 269   |           | 188,151    | 204,365    | 392,516        |
| Rideau.....                       | 2,600                         | 82,804                                 | 85,831    | 3,977  |         |  |            |   | 4,292     | 86,781     | 90,123     | 176,904        |
| Trent Valley.....                 | 3,647                         | 88,664                                 | 85,983    |  |         |  |            |   |           | 88,664     | 85,983     | 174,647        |
| St. Andrews.....                  | 334                           | 50,503                                 | 55,541    |  |         |  |            |   |           | 50,503     | 55,541     | 106,044        |
| Total Canadian.....               | 26,125                        | 4,891,369                              | 4,976,317 | 764,317  | 124,505 | 4,687  | 2,109      | 385,433                                     | 902,119   | 6,045,806  | 6,005,050  | 12,050,856     |
| United States Vessels.            |                               |  |           |  |         |  |            |   |           |            |            |                |
| Sault Ste. Marie.....             | 2,966                         | 7,185                                  | 8,521     | 14,189   | 359,715 | 3,001,845  | 10,079,352 | 258,504                                     | 98,559    | 3,281,723  | 10,546,147 | 13,827,870     |
| Welland.....                      | 790                           | 5,289                                  | 3,137     | 68,194   | 195     | 277,646  | 178,948    | 2,282                                       | 221,521   | 353,411    | 403,801    | 757,212        |
| St. Lawrence.....                 | 1,263                         | 15,015                                 | 16,009    | 363,794  | 394     | 13,206   | 1,514      | 3,258                                       | 363,300   | 395,273    | 381,217    | 776,490        |
| Chambly.....                      | 2,348                         |  | 2,557     | 116,561  |         |  |            |   | 122,554   | 116,561    | 125,111    | 241,672        |
| St. Peters.....                   | 8                             | 334                                    | 53        |  |         |  |            | 26  |           | 360        | 53         | 413            |
| Murray.....                       | 57                            | 1,670                                  | 235       | 389  |         | 39   | 21         | 37  | 498       | 2,135      | 754        | 2,889          |
| Ottawa.....                       | 275                           | 8,943                                  | 96        |  | 13,525  |  |            | 4,693                                       |           | 13,636     | 13,621     | 27,257         |
| Rideau.....                       | 35                            | 810                                    | 927       | 390  |         |  |            |   | 484       | 1,200      | 1,411      | 2,611          |
| Trent Valley.....                 |                               |  |           |  |         |  |            |   |           |            |            |                |
| St. Andrews.....                  |                               |  |           |  |         |  |            |   |           |            |            |                |
| Total United States.....          | 7,742                         | 39,246                                 | 31,535    | 563,517  | 373,829 | 3,292,736  | 10,259,835 | 268,800                                     | 806,916   | 4,164,299  | 11,472,115 | 15,636,414     |
| Grand total Canadian and U.S..... | 33,867                        | 4,930,615                              | 5,007,852 | 1,327,834                                      | 498,334 | 3,297,423  | 10,261,944 | 654,233                                     | 1,709,035 | 10,210,105 | 17,477,165 | 27,687,270     |

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TABLE 3.—Statement showing the Number, Tonnage, and Nationality of Vessels passed through the several canals during the Season of Navigation in 1914.

| Vessels.                             | Total No. | From Canadian to Canadian Ports. |           | From Canadian to United States Ports. |         | From United States to United States Ports. |            | From United States to Canadian Ports. |         | Tons.     |            | Total tons. |
|--------------------------------------|-----------|----------------------------------|-----------|---------------------------------------|---------|--|------------|---------------------------------------|---------|-----------|------------|-------------|
|                                      |           | Up.                              | Down.     | Up.                                   | Down.   | Up.  | Down.      | Up.                                   | Down.   | Up.       | Down.      |             |
| SAULT STE. MARIE CANAL.              |           |                                  |           |                                       |         |  |            |                                       |         |           |            |             |
| Canadian vessels, steam.....         | 2,674     | 1,334,859                        | 1,464,241 | 44,373                                | 121,977 | 301  |            | 360,410                               | 87,087  | 1,739,943 | 1,673,305  | 3,413,248   |
| “ sail.....                          | 337       | 26,258                           | 33,246    |                                       |         |  |            |                                       |         |           |            |             |
| Total Canadian.....                  | 3,011     | 1,361,117                        | 1,497,667 | 44,373                                | 121,977 | 301  |            | 360,770                               | 87,087  | 1,766,561 | 1,706,731  | 3,473,292   |
| United States vessels, steam.....    | 2,955     | 6,297                            | 8,154     | 14,189                                | 359,715 | 3,001,845                                  | 10,073,067 | 257,445                               | 98,559  | 3,279,776 | 10,539,495 | 13,819,271  |
| “ sail.....                          | 11        | 888                              | 367       |                                       |         |  |            |                                       |         |           |            |             |
| Total United States.....             | 2,966     | 7,185                            | 9,521     | 14,189                                | 359,715 | 3,001,845                                  | 10,079,352 | 258,504                               | 98,559  | 3,281,723 | 10,546,147 | 13,827,870  |
| Grand total, Sault Ste. Marie canal. | 5,977     | 1,368,302                        | 1,506,188 | 58,562                                | 481,692 | 3,002,146                                  | 10,079,352 | 619,274                               | 185,646 | 5,048,284 | 12,252,878 | 17,301,162  |
| WELLAND CANAL.                       |           |                                  |           |                                       |         |  |            |                                       |         |           |            |             |
| Canadian vessels, steam.....         | 2,592     | 995,188                          | 989,843   | 311,621                               | 216     | 3,622                                      | 2,109      | 24,039                                | 365,436 | 1,334,470 | 1,357,604  | 2,692,074   |
| “ sail.....                          | 310       | 72,204                           | 76,453    |                                       |         |  |            |                                       |         |           |            |             |
| Total Canadian.....                  | 2,902     | 1,067,392                        | 1,066,296 | 330,574                               | 216     | 4,386                                      | 2,109      | 24,230                                | 383,280 | 1,426,582 | 1,451,901  | 2,878,483   |
| United States vessels, steam.....    | 735       | 4,702                            | 3,137     | 64,557                                | 195     | 274,789                                    | 175,873    | 1,727                                 | 201,806 | 345,775   | 381,011    | 726,786     |
| “ sail.....                          | 55        | 587                              |           |                                       |         |  |            |                                       |         |           |            |             |
| Total United States.....             | 790       | 5,289                            | 3,137     | 68,194                                | 195     | 277,646                                    | 178,948    | 2,282                                 | 221,521 | 353,411   | 403,801    | 757,212     |
| Grand total, Welland canal.....      | 3,692     | 1,072,681                        | 1,069,433 | 398,768                               | 411     | 282,032                                    | 181,057    | 26,512                                | 604,801 | 1,779,993 | 1,855,702  | 3,635,695   |
| ST. LAWRENCE CANALS.                 |           |                                  |           |                                       |         |  |            |                                       |         |           |            |             |
| Canadian vessels, steam.....         | 5,304     | 1,367,812                        | 1,333,355 | 344,372                               | 164     |  |            | 164                                   | 391,538 | 1,712,348 | 1,725,057  | 3,437,405   |
| “ sail.....                          | 3,678     | 505,626                          | 502,333   |                                       |         |  |            |                                       |         |           |            |             |
| Total Canadian.....                  | 8,982     | 1,873,438                        | 1,835,688 | 373,968                               | 164     |  |            | 164                                   | 421,813 | 2,247,570 | 2,257,665  | 4,505,235   |
| United States vessels, steam.....    | 854       | 2,593                            | 82        | 345,476                               | 92      | 12,844                                     | 302        | 184                                   | 343,005 | 361,097   | 343,481    | 704,578     |
| “ sail.....                          | 409       | 12,422                           | 15,927    |                                       |         |  |            |                                       |         |           |            |             |
| Total United States.....             | 1,263     | 15,015                           | 16,009    | 363,794                               | 394     | 13,206                                     | 1,514      | 3,258                                 | 363,300 | 395,273   | 381,217    | 776,490     |
| Grand total, St. Lawrence canals..   | 10,245    | 1,888,453                        | 1,851,697 | 737,762                               | 558     | 13,206                                     | 1,514      | 3,422                                 | 785,113 | 2,642,843 | 2,638,882  | 5,281,725   |



TABLE 3.—Statement showing the number, Tonnage, and Nationality of Vessels passed through the several canals during the Season of Navigation in 1914—*Concluded*.

| Vessels.  | Total No. | From Canadian to Canadian Ports. |        | From Canadian to United States Ports. |         | From United States to United States Ports. |       | From United States to Canadian Ports. |       | Tons.   |         | Total tons. |
|---|-----------|----------------------------------|--------|---------------------------------------|---------|--|-------|---------------------------------------|-------|---------|---------|-------------|
|   |           | Up.                              | Down.  | Up.                                   | Down.   | Up.  | Down. | Up.                                   | Down. | Tons.   | Tons.   |             |
|   |           |                                  |        |                                       |         |  |       |                                       |       |         |         |             |
| CHAMBLEY CANAL.<br>Canadian vessels, steam.<br>“ sail.<br>Total Canadian.                           | 167       | 20,604                           | 18,636 | Tons.                                 | 127     | Tons.                                      |       | Tons.                                 |       | 20,731  | Tons.   | 39,367      |
|   | 179       | 4,310                            | 4,253  | 1,852                                 |         |  |       | 2,954                                 |       | 6,162   | 7,207   | 13,369      |
|   | 346       | 24,914                           | 22,889 | 1,979                                 |         |  |       | 2,954                                 |       | 26,893  | 25,843  | 52,736      |
|   |           |                                  |        |                                       |         |  |       |                                       |       |         |         |             |
| United States vessels, steam.<br>“ sail.<br>Total United States.<br>Grand total, Chambly canal.     | 2,348     |                                  | 2,557  |                                       | 116,561 |  |       | 122,554                               |       | 116,561 | 125,111 | 241,672     |
|   | 2,348     |                                  | 2,557  | 116,561                               |         |  |       | 122,554                               |       | 116,561 | 125,111 | 241,672     |
|   | 2,694     | 24,914                           | 25,446 | 118,540                               |         |  |       | 125,508                               |       | 143,454 | 150,954 | 294,408     |
|   |           |                                  |        |                                       |         |  |       |                                       |       |         |         |             |
| ST. PETER'S CANAL.<br>Canadian vessels, steam.<br>“ sail.<br>Total Canadian.                        | 451       | 18,350                           | 14,763 |                                       |         |  |       |                                       |       | 18,350  | 14,763  | 33,113      |
|   | 741       | 23,413                           | 23,726 |                                       |         |  |       |                                       |       | 23,413  | 23,726  | 47,139      |
|   | 1,192     | 41,763                           | 38,489 |                                       |         |  |       |                                       |       | 41,763  | 38,489  | 80,252      |
|   |           |                                  |        |                                       |         |  |       |                                       |       |         |         |             |
| United States vessels, steam.<br>“ sail.<br>Total United States.<br>Grand total, St. Peter's canal. | 1         |                                  |        |                                       |         |  |       |                                       |       | 26      |         | 26          |
|   | 7         | 334                              | 53     |                                       |         |  |       |                                       |       | 334     | 53      | 387         |
|   | 8         | 334                              | 53     |                                       |         |  |       |                                       |       | 360     | 53      | 413         |
|   | 1,200     | 42,097                           | 38,542 |                                       |         |  |       |                                       |       | 42,123  | 38,542  | 80,665      |
| MURRAY CANAL.<br>Canadian vessels, steam.<br>“ sail.<br>Total Canadian.                             | 656       | 87,558                           | 63,217 | 8,086                                 | 543     |  |       |                                       |       | 95,644  | 65,050  | 160,694     |
|   | 258       | 25,334                           | 21,956 | 1,360                                 |         |  |       | 1,403                                 |       | 26,694  | 23,359  | 50,053      |
|   | 914       | 112,892                          | 85,173 | 9,446                                 | 543     |  |       | 2,693                                 |       | 122,338 | 88,409  | 210,747     |
|   |           |                                  |        |                                       |         |  |       |                                       |       |         |         |             |
| United States vessels, steam.<br>“ sail.<br>Total United States.<br>Grand total, Murray canal.      | 47        | 1,670                            | 235    | 327                                   |         | 37   | 14    | 463                                   |       | 2,048   | 712     | 2,760       |
|   | 10        |                                  |        | 62                                    |         | 2  | 7     | 35                                    |       | 87      | 42      | 129         |
|   | 57        | 1,670                            | 235    | 389                                   |         | 39   | 21    | 498                                   |       | 2,135   | 754     | 2,889       |
|   | 971       | 114,562                          | 85,408 | 9,835                                 | 543     | 39   | 21    | 3,191                                 |       | 124,473 | 89,163  | 213,636     |

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TABLE 4.—Comparative Statement of all the canals, for the years ending December 31, 1913 and 1914.

| Articles.                          | 1913.      | 1914.              | Increase. | Decrease. |
|------------------------------------|------------|--------------------|-----------|-----------|
| <i>Class No. 1.</i>                | Tons.      | Tons. <sup>1</sup> | Tons.     | Tons.     |
| Canadian vessels, steam            | 9,730,702  | 10,244,207         | 513,505   |           |
| "    sail.....                     | 2,347,360  | 1,806,649          |           | 540,711   |
| United States vessels, steam       | 23,788,434 | 15,253,993         |           | 8,534,441 |
| "    sail....                      | 450,333    | 382,421            |           | 67,912    |
| Total, Class No. 1.....            | 36,316,829 | 27,687,270         | 513,505   | 9,143,064 |
| <i>Class No. 2.</i>                | No.        | No.                | No.       | No.       |
| Passengers                         | 335,799    | 287,326            |           | 48,473    |
| <i>Class No. 3.</i>                | Tons.      | Tons.              | Tons.     | Tons.     |
| Barley                             | 423,728    | 332,983            |           | 90,745    |
| Buckwheat.....                     | 5          | 317                | 312       |           |
| Corn.....                          | 176,490    | 154,335            |           | 22,155    |
| Oats.....                          | 842,737    | 816,232            |           | 26,505    |
| Rye.....                           | 13,620     | 45,954             | 32,334    |           |
| Flax.....                          | 711,921    | 108,671            |           | 603,250   |
| Peas.....                          | 375        | 84                 |           | 291       |
| Wheat.....                         | 5,956,153  | 6,045,317          | 89,164    |           |
| Flour.....                         | 334,602    | 408,708            | 74,106    |           |
| Hay.....                           | 18,283     | 15,008             |           | 3,275     |
| Other mill products.....           | 26,542     | 15,844             |           | 10,698    |
| Fruit and vegetables.....          | 9,958      | 12,224             | 2,266     |           |
| Potatoes.....                      | 7,915      | 7,191              |           | 724       |
| Live stock.....                    | 2,826      | 1,587              |           | 1,239     |
| Poultry, game and fish.....        | 2,237      | 1,529              |           | 708       |
| Dressed meats.....                 | 168        | 61                 |           | 107       |
| Other packing house products.....  | 1,996      | 1,523              |           | 473       |
| Hides and leather.....             | 70         | 40                 |           | 30        |
| Wool.....                          | 228        | 484                | 256       |           |
| All other animal products.....     | 11,774     | 10,457             |           | 1,317     |
| Total, Class No. 3.....            | 8,541,628  | 7,978,549          | 198,438   | 761,517   |
| <i>Class No. 4.</i>                | Tons.      | Tons.              | Tons.     | Tons.     |
| Agricultural products.....         | 28,299     | 14,085             |           | 14,214    |
| Cement, bricks, lime.....          | 413,041    | 147,657            |           | 265,384   |
| Household goods and furniture..... | 3,948      | 3,469              |           | 479       |
| Iron, pig and bloom.....           | 67,646     | 41,846             |           | 25,800    |
| "    and steel, all other.....     | 311,955    | 162,179            |           | 149,776   |
| Petroleum and other oils.....      | 169,765    | 135,751            |           | 34,014    |
| Sugar.....                         | 54,445     | 71,036             | 16,591    |           |
| Salt.....                          | 20,775     | 20,620             |           | 155       |
| Wines, liquors and beers.....      | 27,847     | 19,881             |           | 7,966     |
| Merchandise not enumerated....     | 783,978    | 602,001            |           | 181,977   |
| Total, Class No. 4.....            | 1,881,699  | 1,218,525          | 16,591    | 679,765   |
| <i>Class No. 5.</i>                | Tons.      | Tons.              | Tons.     | Tons.     |
| Pulpwood.....                      | 980,726    | 1,017,993          | 37,267    |           |
| Sawed lumber....                   | 596,722    | 470,400            |           | 126,322   |
| Squared timber.....                | 41,032     | 24,369             |           | 16,663    |
| Shingles.....                      | 7,296      | 3,288              |           | 4,008     |
| Other woods....                    | 53,149     | 105,917            | 52,768    |           |
| Total, Class No. 5.....            | 1,678,925  | 1,621,967          | 90,035    | 146,993   |



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TABLE 4.—Comparative Statement of all the canals, for the years ending December 31, 1913 and 1914—*Concluded*.

| Articles.               | 1913.      | 1914.      | Increase. | Decrease.  |
|-------------------------|------------|------------|-----------|------------|
| <i>Class No. 6.</i>     | Tons.      | Tons.      | Tons.     | Tons.      |
| Hard coal.....          | 1,503,412  | 1,176,567  |           | 326,845    |
| Soft coal.....          | 5,241,567  | 3,561,754  |           | 1,679,813  |
| Coke.....               | 2          | 20         | 18        |            |
| Copper ore.....         | 25,855     | 2,887      |           | 22,968     |
| Iron ore.....           | 32,498,724 | 20,917,633 |           | 11,581,091 |
| Other ore.....          | 32,192     | 33,054     | 862       |            |
| Sand, etc.....          | 649,909    | 512,281    |           | 137,628    |
| Total, Class No. 6..... | 39,951,661 | 26,204,196 | 880       | 13,748,345 |
| Grand total.....        | 52,053,913 | 37,023,237 | 305,944   | 15,336,620 |

Net decrease, 15,030,676.



TABLE 5.—Statement of Traffic on the undermentioned canals during the Season of Navigation in 1914.

| Articles.                         | Sault<br>Ste. Marie. | Welland.         | St.<br>Lawrence. | Chambly.       | St. Peters.   | Murray.        | Ottawa.        | Rideau.        | Trent<br>Valley. | St.<br>Andrews. |
|-----------------------------------|----------------------|------------------|------------------|----------------|---------------|----------------|----------------|----------------|------------------|-----------------|
| <i>Class No. 1.—Vessels.</i>      | Tons.                | Tons.            | Tons.            | Tons.          | Tons.         | Tons.          | Tons.          | Tons.          | Tons.            | Tons.           |
| Canadian Vessels..... Steam.      | 3,413,248            | 2,692,074        | 3,437,405        | 39,367         | 33,851        | 160,694        | 178,766        | 133,426        | 130,385          | 21,991          |
| “..... Sail.                      | 60,044               | 186,409          | 1,067,830        | 13,369         | 46,401        | 50,053         | 213,750        | 43,478         | 44,262           | 81,053          |
| United States..... Steam.         | 13,819,271           | 726,786          | 704,578          | .....          | 26            | 2,760          | .....          | 572            | .....            | .....           |
| “..... Sail.                      | 8,599                | 30,426           | 71,912           | 241,672        | 387           | 129            | 27,257         | 2,039          | .....            | .....           |
| <i>Total, Class No. 1.....</i>    | <i>17,301,162</i>    | <i>3,635,695</i> | <i>5,281,725</i> | <i>294,408</i> | <i>80,665</i> | <i>213,636</i> | <i>419,773</i> | <i>179,515</i> | <i>174,647</i>   | <i>106,044</i>  |
| <i>Class No. 2.</i>               | No.                  | No.              | No.              | No.            | No.           | No.            | No.            | No.            | No.              | No.             |
| Passengers.....                   | 30,446               | 25               | 106,618          | 2,677          | 351           | 15,893         | 23,835         | 19,730         | 85,218           | 2,533           |
| <i>Class No. 3.</i>               | Tons.                | Tons.            | Tons.            | Tons.          | Tons.         | Tons.          | Tons.          | Tons.          | Tons.            | Tons.           |
| Barley.....                       | 151,662              | 89,622           | 91,675           | 1              | 17            | .....          | 6              | .....          | .....            | .....           |
| Buckwheat.....                    | .....                | .....            | 316              | .....          | .....         | .....          | .....          | 1              | .....            | .....           |
| Corn.....                         | 11,121               | 112,133          | 30,951           | 17             | 11            | .....          | 21             | 81             | .....            | .....           |
| Oats.....                         | 376,168              | 225,668          | 209,704          | 1,419          | 2,443         | .....          | 348            | 448            | 24               | 10              |
| Rye.....                          | 26,347               | 10,220           | 9,387            | .....          | .....         | .....          | .....          | .....          | .....            | .....           |
| Flax.....                         | 66,444               | 20,657           | 21,570           | .....          | .....         | .....          | .....          | .....          | .....            | .....           |
| Peas.....                         | .....                | .....            | 40               | 2              | 10            | .....          | 5              | 21             | 6                | .....           |
| Wheat.....                        | 2,942,015            | 1,559,909        | 1,542,796        | 2              | 4             | .....          | 130            | 92             | 369              | .....           |
| Flour.....                        | 220,581              | 87,701           | 98,151           | 695            | 623           | .....          | 499            | 366            | 80               | 12              |
| Hay.....                          | 864                  | .....            | 7,510            | 4,663          | 1,131         | .....          | 293            | 459            | 88               | .....           |
| Other mill products.....          | 2,144                | 10,318           | 1,427            | 346            | 584           | .....          | 570            | 322            | 133              | .....           |
| Fruit and vegetables.....         | 1,940                | 150              | 5,832            | 2,018          | 1,302         | 149            | 608            | 221            | 4                | .....           |
| Potatoes.....                     | 51                   | .....            | 676              | 85             | 5,720         | .....          | 552            | 16             | 91               | .....           |
| Live stock.....                   | 28                   | .....            | 649              | 174            | 21            | .....          | 417            | 27             | 271              | .....           |
| Poultry, game and fish.....       | .....                | 66               | 90               | 17             | 1,284         | .....          | 44             | 27             | .....            | 1               |
| Dressed meats.....                | .....                | .....            | 17               | .....          | 27            | .....          | 3              | 12             | 2                | .....           |
| Other packing house products..... | 45                   | 45               | 751              | 20             | 183           | .....          | 169            | 310            | .....            | .....           |
| Hides and leather.....            | .....                | .....            | 22               | .....          | .....         | .....          | .....          | 18             | .....            | .....           |
| Wool.....                         | 142                  | 164              | 175              | .....          | .....         | .....          | .....          | 3              | .....            | .....           |
| All other animal products.....    | 2                    | .....            | 5,201            | .....          | 28            | .....          | 2,550          | 2,613          | 63               | .....           |
| <i>Total, Class No. 3.....</i>    | <i>3,799,554</i>     | <i>2,116,653</i> | <i>2,026,940</i> | <i>9,459</i>   | <i>13,388</i> | <i>149</i>     | <i>6,215</i>   | <i>5,037</i>   | <i>1,131</i>     | <i>23</i>       |



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| Class No. 4.                       |            |           |           |         |        |         |         |        |        |
|------------------------------------|------------|-----------|-----------|---------|--------|---------|---------|--------|--------|
| Agricultural implements.....       |            |           |           |         |        |         |         |        |        |
|                                    | 6,550      | 6,570     | 126       | 93      | 15     | 114     | 588     | 29     |        |
| Cement, bricks, lime.....          | 46,899     | 35,871    | 46,160    | 616     | 205    | 2,900   | 556     | 430    | 150    |
| Household goods and furniture..... |            |           | 2,604     | 95      | 41     | 203     | 381     | 145    |        |
| Iron, pig and bloom.....           | 24,754     | 81,100    | 6,663     | 733     |        | 972     | 615     | 9      |        |
| Iron and steel, all other.....     | 83,727     | 25,937    | 50,076    | 1,557   |        | 144     | 515     |        | 18     |
| Petroleum and other oils.....      | 8,623      | 73,990    | 51,192    | 65      | 40     | 578     | 630     | 88     | 1      |
| Sugar.....                         | 11,478     | 34,860    | 23,262    | 103     |        | 490     | 673     | 15     |        |
| Salt.....                          | 14,487     | 200       | 2,973     | 868     |        | 751     | 809     | 2      |        |
| Wines, liquors and beers.....      | 4,571      | 5,243     | 8,283     | 56      |        | 675     | 851     | 14     |        |
| Merchandise not enumerated.....    | 286,700    | 170,403   | 105,930   | 6,925   | 2,445  | 11,836  | 7,848   | 2,311  | 119    |
| Total, Class No. 4.....            | 487,789    | 361,174   | 297,269   | 11,111  | 4,117  | 18,663  | 13,466  | 3,043  | 288    |
| Class No. 5.                       |            |           |           |         |        |         |         |        |        |
| Pulpwood.....                      | 1,920      | 329,673   | 472,376   | 188,605 |        |         | 1,173   | 21,966 | 2,280  |
| Sawed lumber.....                  | 34,327     | 21,099    | 164,049   | 104,178 | 1,850  | 131,683 | 10,429  | 2,760  | 25     |
| Squared timber.....                | 20         | 6,243     | 15,972    | 145     | 269    | 1,072   | 341     | 237    |        |
| Shingles.....                      | 2,500      | 175       | 212       | 27      | 187    | 36      | 65      | 86     |        |
| Other woods.....                   | 2,189      | 3,244     | 16,166    | 287     | 820    | 38,649  | 3,033   | 37,424 | 3,745  |
| Total, Class No. 5.....            | 40,956     | 360,434   | 668,775   | 293,242 | 3,126  | 171,440 | 15,041  | 62,473 | 6,050  |
| Class No. 6.                       |            |           |           |         |        |         |         |        |        |
| Hard coal.....                     | 342,210    | 250,083   | 448,402   | 118,560 | 172    | 4,660   | 9,454   | 78     | 240    |
| Soft coal.....                     | 1,996,434  | 699,223   | 799,118   | 6       | 27,602 | 36,893  | 823     | 285    | 20     |
| Coke.....                          |            |           | 20        |         |        |         |         |        |        |
| Copper ore.....                    | 2,887      |           |           |         |        |         |         |        |        |
| Iron ore.....                      | 20,913,764 | 3,862     |           |         |        |         | 3       | 4      |        |
| Other ore.....                     | 13,575     | 10,289    | 4,020     | 636     |        | 3,900   | 634     |        |        |
| Sand, ecc.....                     | 2,015      | 59,251    | 146,949   | 3,891   | 5,775  | 93,361  | 107,281 | 701    | 35,392 |
| Total, Class No. 6.....            | 23,270,885 | 1,022,708 | 1,398,509 | 123,093 | 33,549 | 138,814 | 118,195 | 1,068  | 35,652 |
| Grand total.....                   | 27,599,184 | 3,860,969 | 4,391,493 | 436,905 | 54,189 | 335,132 | 151,739 | 67,715 | 42,013 |



TABLE 6. Summary Statement of Traffic on the undermentioned canals during the Season of Navigation ended December 31, 1914, showing the total quantity of each description of property passed through.

| Articles.                       | Sault Ste. Marie. |     | Welland.  |     | St. Lawrence. |     | Chambly. |     | St. Peters. |     | Murray. |     | Ottawa. |     | Rideau. |     | Trent Valley. |     | St. Andrews. |     |
|---------------------------------|-------------------|-----|-----------|-----|---------------|-----|----------|-----|-------------|-----|---------|-----|---------|-----|---------|-----|---------------|-----|--------------|-----|
|                                 | Tons.             | No. | Tons.     | No. | Tons.         | No. | Tons.    | No. | Tons.       | No. | Tons.   | No. | Tons.   | No. | Tons.   | No. | Tons.         | No. | Tons.        | No. |
| Vessels of all kinds.           | 17,301,162        |     | 3,635,695 |     | 5,281,725     |     | 294,408  |     | 79,600      |     | 213,636 |     | 419,773 |     | 179,515 |     | 174,647       |     | 106,044      |     |
| Passengers.                     | 30,446            |     | 25        |     | 106,618       |     | 2,677    |     | 351         |     | 15,893  |     | 23,835  |     | 19,730  |     | 85,218        |     | 2,533        |     |
| Forest—Produce of Wood.         | Tons.             |     | Tons.     |     | Tons.         |     | Tons.    |     | Tons.       |     | Tons.   |     | Tons.   |     | Tons.   |     | Tons.         |     | Tons.        |     |
| Pulpwood.                       | 1,920             |     | 329,673   |     | 472,376       |     | 188,605  |     |             |     |         |     |         |     | 1,173   |     | 21,966        |     | 2,280        |     |
| Sawed lumber.                   | 34,327            |     | 21,099    |     | 164,049       |     | 104,178  |     | 1,850       |     |         |     | 131,683 |     | 10,429  |     | 2,760         |     | 25           |     |
| Squared timber.                 | 20                |     | 6,243     |     | 15,972        |     | 145      |     | 269         |     | 70      |     | 1,072   |     | 341     |     | 237           |     |              |     |
| Shingles.                       | 2,500             |     | 175       |     | 212           |     | 27       |     | 187         |     |         |     | 36      |     | 65      |     | 86            |     |              |     |
| Other woods.                    | 2,189             |     | 3,244     |     | 16,166        |     | 287      |     | 820         |     | 360     |     | 38,649  |     | 3,033   |     | 37,424        |     | 3,715        |     |
| Total.                          | 40,956            |     | 360,434   |     | 668,775       |     | 293,242  |     | 3,126       |     | 430     |     | 171,440 |     | 15,041  |     | 62,473        |     | 6,050        |     |
| Animals and Produce of Animals. |                   |     |           |     |               |     |          |     |             |     |         |     |         |     |         |     |               |     |              |     |
| Live stock.                     | 28                |     |           |     | 649           |     | 174      |     | 21          |     |         |     | 417     |     | 27      |     | 271           |     |              |     |
| Poultry, game and fish.         |                   |     | 66        |     | 90            |     | 17       |     | 1,284       |     |         |     | 44      |     | 27      |     |               |     | 1            |     |
| Dressed meats.                  |                   |     |           |     | 17            |     |          |     | 27          |     |         |     | 3       |     | 12      |     | 2             |     |              |     |
| Other packing house products.   | 45                |     | 45        |     | 751           |     | 20       |     | 183         |     |         |     | 169     |     | 310     |     |               |     |              |     |
| Hides and leather.              |                   |     |           |     | 22            |     |          |     |             |     |         |     |         |     | 18      |     |               |     |              |     |
| Wool.                           | 142               |     | 164       |     | 175           |     |          |     |             |     |         |     |         |     | 3       |     |               |     |              |     |
| All other animal products.      | 2                 |     |           |     | 5,201         |     |          |     | 28          |     |         |     | 2,550   |     | 2,613   |     | 63            |     |              |     |
| Total.                          | 217               |     | 2751      |     | 6,905         |     | 211      |     | 1,543       |     |         |     | 3,183   |     | 3,010   |     | 336           |     | 1            |     |
| Agricultural Products.          |                   |     |           |     |               |     |          |     |             |     |         |     |         |     |         |     |               |     |              |     |
| Barley.                         | 151,662           |     | 89,622    |     | 91,675        |     | 1        |     | 17          |     |         |     | 6       |     |         |     |               |     |              |     |
| Buckwheat.                      |                   |     |           |     | 316           |     |          |     |             |     |         |     |         |     | 1       |     |               |     |              |     |
| Corn.                           | 11,121            |     | 112,133   |     | 30,951        |     | 17       |     | 11          |     |         |     | 21      |     | 81      |     |               |     |              |     |
| Oats.                           | 376,168           |     | 225,668   |     | 209,704       |     | 1,419    |     | 2,443       |     |         |     | 348     |     | 448     |     | 24            |     | 10           |     |
| Rye.                            | 26,347            |     | 10,220    |     | 9,387         |     |          |     |             |     |         |     |         |     |         |     |               |     |              |     |
| Flax.                           | 66,444            |     | 20,657    |     | 21,570        |     | 2        |     | 10          |     |         |     | 5       |     | 21      |     | 6             |     |              |     |
| Pease.                          |                   |     |           |     | 49            |     |          |     |             |     |         |     |         |     |         |     |               |     |              |     |



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|   |            |           |           |         |        |         |         |        |        |
|---|------------|-----------|-----------|---------|--------|---------|---------|--------|--------|
| Wheat.....  | 2,942,015  | 1,559,909 | 1,542,796 | 2       | 4      | 130     | 92      | 369    | 12     |
| Flour.....  | 220,581    | 87,701    | 98,151    | 695     | 623    | 499     | 366     | 80     |        |
| Hay.....  | 864        |           | 7,510     | 4,663   | 1,131  | 293     | 459     | 88     |        |
| Other mill products.....  | 2,144      | 10,318    | 1,427     | 346     | 584    | 570     | 322     | 133    |        |
| Fruit and vegetables.....   | 1,940      | 150       | 5,832     | 2,018   | 1,302  | 608     | 221     | 4      |        |
| Potatoes.....   | 51         |           | 676       | 85      | 5,720  | 552     | 16      | 91     |        |
| Total .....   | 3,799,337  | 2,116,378 | 2,020,035 | 9,248   | 11,845 | 3,032   | 2,027   | 795    | 22     |
| <i>Manufactures.</i>  |            |           |           |         |        |         |         |        |        |
| Agricultural implements.....  | 6,550      | 6,570     | 126       | 93      | 15     | 144     | 588     | 29     |        |
| Cement, bricks and lime.....  | 46,899     | 35,871    | 46,160    | 616     | 205    | 2,900   | 556     | 430    | 150    |
| Household goods and furniture.....                                  |            |           | 2,604     | 95      | 41     | 203     | 381     | 145    |        |
| Iron, pig and bloom.....  | 24,754     | 8,100     | 6,663     | 733     |        | 972     | 615     | 9      |        |
| Iron, steel, all other.....   | 83,727     | 25,937    | 50,076    | 1,557   | 165    | 144     | 515     |        | 18     |
| Petroleum and other oils.....                                       | 8,623      | 73,990    | 51,192    | 65      | 449    | 578     | 630     | 88     | 1      |
| Sugar.....  | 11,478     | 34,860    | 23,262    | 103     | 155    | 490     | 673     | 15     |        |
| Salt.....   | 14,487     | 200       | 2,973     | 868     | 530    | 751     | 809     | 2      |        |
| Wines, liquors and beers.....                                       | 4,571      | 5,243     | 8,283     | 56      | 112    | 675     | 851     | 14     |        |
| Merchandise not enumerated.....                                     | 286,700    | 170,403   | 105,930   | 6,925   | 2,445  | 11,836  | 7,848   | 2,311  | 119    |
| Total.....  | 487,789    | 361,174   | 297,269   | 11,111  | 4,117  | 18,663  | 13,466  | 3,043  | 288    |
| <i>Products of Mines.</i>   |            |           |           |         |        |         |         |        |        |
| Hard coal.....  | 342,210    | 250,083   | 448,402   | 118,560 | 172    | 4,680   | 9,454   | 78     | 240    |
| Soft coal.....  | 1,996,434  | 699,223   | 799,118   | 6       | 27,602 | 36,893  | 823     | 285    | 20     |
| Coke.....   |            |           | 20        |         |        |         |         |        |        |
| Copper ore.....   | 2,887      |           |           |         |        |         |         |        |        |
| Iron ore.....   | 20,913,764 | 3,862     |           |         |        |         | 3       | 4      |        |
| Other ore.....  | 13,575     | 10,289    | 4,020     | 636     |        | 3,900   | 634     |        |        |
| Sand, etc.....  | 2,015      | 59,251    | 146,949   | 3,891   | 5,775  | 93,361  | 107,281 | 701    | 35,392 |
| Total.....  | 23,270,885 | 1,022,708 | 1,398,509 | 123,093 | 33,549 | 138,814 | 118,195 | 1,068  | 35,652 |
| Grand totals (passengers and tonnage of vessels) not included ..... | 27,599,184 | 3,860,969 | 4,391,493 | 436,905 | 54,180 | 335,132 | 151,739 | 67,715 | 42,013 |



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TABLE 7, (No. 1.)—(GENERAL STATEMENT showing the Quantity of each Article transported on the Sault Ste. Marie canal during the Season of Navigation in 1914.

| Articles.                 | From Canadian to Canadian Ports. |                     | From Canadian to U. States Ports. |         | From U. States to U. States Ports. |            | From U. States to Canadian Ports. |         | Tons.     |            | Total tons. | Origin of Cargo. |            |
|---------------------------|----------------------------------|---------------------|-----------------------------------|---------|------------------------------------|------------|-----------------------------------|---------|-----------|------------|-------------|------------------|------------|
|                           | Up.                              | Down.               | Up.                               | Down.   | Up.                                | Down.      | Up.                               | Down.   | Up.       | Down.      |             | Canadian.        | U. S.      |
| Agricultural Implements   | 6,550                            |                     |                                   |         |                                    |            |                                   |         | 6,550     |            | 6,550       | 6,550            |            |
| All other animals         |                                  | 87,867 <sup>2</sup> |                                   |         |                                    |            |                                   |         |           |            | 2           |                  |            |
| Barley                    |                                  |                     |                                   | 8,784   |                                    | 52,323     |                                   | 2,688   |           | 151,662    | 151,662     | 96,651           | 55,011     |
| Cement bricks, etc.       | 37,269                           |                     |                                   |         | 9,630                              |            |                                   |         | 46,899    |            | 46,899      | 37,269           | 9,630      |
| Coal, hard                | 74                               |                     |                                   |         | 158,860                            |            | 183,276                           |         | 342,210   |            | 342,210     |                  | 342,210    |
| " soft                    | 300                              |                     | 600                               |         | 944,744                            |            | 1,050,790                         |         | 1,996,434 |            | 1,996,434   |                  | 1,996,434  |
| Corn                      |                                  |                     |                                   |         |                                    | 11,121     |                                   |         |           | 11,121     | 11,121      |                  | 11,121     |
| Flax                      |                                  | 31,338              |                                   | 22,719  |                                    | 12,387     |                                   |         |           | 66,444     | 66,444      | 54,057           | 12,387     |
| Flour                     | 18                               | 193,421             |                                   |         |                                    | 22,968     |                                   | 4,174   |           | 220,563    | 220,581     | 197,613          | 22,968     |
| Fruits and vegetables     | 1,940                            |                     |                                   |         |                                    |            |                                   |         | 1,940     |            | 1,940       | 1,940            |            |
| Hay                       | 864                              |                     |                                   |         |                                    |            |                                   |         | 864       |            | 864         | 864              |            |
| Iron, pig and bloom       | 17,094                           |                     |                                   | 2,000   | 60                                 |            | 5,600                             |         | 22,754    | 2,000      | 24,754      | 18,870           | 5,884      |
| Iron and steel, all other | 30,360                           | 34,313              |                                   | 2,200   | 16,839                             |            | 15                                |         | 47,214    | 36,513     | 83,727      | 64,095           | 19,632     |
| Live stock                | 28                               |                     |                                   |         |                                    |            |                                   |         | 28        |            | 28          |                  |            |
| Merchandise               | 241,398                          | 6,955               | 9,574                             | 2       | 20,638                             | 1,299      | 6,213                             | 621     | 277,823   | 8,877      | 286,700     | 253,290          | 33,410     |
| Oats                      |                                  | 347,265             |                                   | 15,400  |                                    | 9,253      |                                   | 4,250   |           | 376,168    | 376,168     | 370,342          | 5,826      |
| Other Mill products       |                                  | 2,144               |                                   |         |                                    |            |                                   |         |           | 2,144      | 2,144       | 2,144            |            |
| Other pack, house prod.   | 45                               |                     |                                   |         |                                    |            |                                   |         | 45        |            | 45          |                  |            |
| Other woods               |                                  | 2,189               |                                   |         |                                    |            |                                   |         |           | 2,189      | 2,189       |                  |            |
| Ore, all other            | 120                              | 80                  |                                   | 13,375  |                                    |            |                                   |         |           | 13,455     | 13,575      | 13,575           |            |
| " copper                  |                                  |                     |                                   |         |                                    | 2,887      |                                   |         |           | 2,887      | 2,887       |                  | 2,887      |
| " iron                    | 3,696                            | 26,588              |                                   | 60,983  |                                    | 20,732,509 |                                   | 89,988  | 3,696     | 20,910,068 | 20,913,764  | 95,811           | 20,817,953 |
| Petroleum                 | 8,554                            | 30                  |                                   |         | 39                                 |            |                                   |         | 8,593     | 30         | 8,623       | 8,584            | 39         |
| Potatoes                  | 51                               |                     |                                   |         |                                    |            |                                   |         | 51        |            | 51          | 51               |            |
| Pulpwood                  | 1,920                            |                     |                                   |         |                                    |            |                                   |         | 1,920     |            | 1,920       | 1,920            |            |
| Rye                       |                                  |                     |                                   |         |                                    | 26,347     |                                   |         |           | 26,347     | 26,347      |                  | 26,347     |
| Sawed lumber              | 676                              | 933                 |                                   | 29,191  |                                    | 3,527      |                                   |         | 676       | 33,651     | 34,327      | 27,178           | 7,149      |
| Shingles                  | 1                                | 20                  |                                   |         |                                    | 2,479      |                                   |         | 1         | 2,499      | 2,500       | 21               | 2,479      |
| Square timber             | 20                               |                     |                                   |         |                                    |            |                                   |         | 20        |            | 20          | 20               |            |
| Sugar                     | 11,478                           |                     |                                   |         |                                    |            |                                   |         | 11,478    |            | 11,478      | 11,478           |            |
| Salt                      | 12,247                           |                     |                                   |         | 2,240                              |            |                                   |         | 14,487    |            | 14,487      | 14,397           | 90         |
| Sand and stone            | 399                              | 1,616               |                                   |         |                                    |            |                                   |         | 399       | 1,616      | 2,015       | 2,015            |            |
| Wheat                     |                                  | 1,755,637           |                                   | 427,521 |                                    | 561,885    |                                   | 196,972 |           | 2,942,015  | 2,942,015   | 2,324,035        | 617,980    |
| Wines, liquors and beers  | 4,571                            |                     |                                   |         |                                    |            |                                   |         | 4,571     |            | 4,571       | 4,571            |            |
| Wool                      | 30                               | 112                 |                                   |         |                                    |            |                                   |         | 30        | 112        | 142         | 142              |            |
| Total freight             | 379,703                          | 2,490,510           | 10,174                            | 582,175 | 1,153,050                          | 21,438,985 | 1,245,894                         | 298,693 | 2,788,821 | 24,810,363 | 27,599,184  | 3,609,747        | 23,989,437 |



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TABLE 7, (No. 2.)—GENERAL STATEMENT showing the Quantity of each Article transported on the Welland canal during the Season of Navigation in 1914.

| Articles.                 | From Canadian to Canadian Ports. |           | From Canadian to U. States Ports. |       | From U. States to U. States Ports. |         | From U. States to Canadian Ports. |           | Tons.   |           | Total Tons. | Origin of Cargo. |           |
|---------------------------|----------------------------------|-----------|-----------------------------------|-------|------------------------------------|---------|-----------------------------------|-----------|---------|-----------|-------------|------------------|-----------|
|                           | Up.                              | Down.     | Up.                               | Down. | Up.                                | Down.   | Up.                               | Down.     | Up.     | Down.     |             | Canadian.        | U. S.     |
|                           |                                  |           |                                   |       |                                    |         |                                   |           |         |           |             |                  |           |
| Agricultural Implm'ts.    | 6,570                            |           |                                   |       |                                    |         |                                   |           | 6,570   |           | 6,570       | 6,570            |           |
| Barley.....               |                                  | 84,911    |                                   |       |                                    |         |                                   |           |         | 89,622    | 89,622      | 82,200           | 7,422     |
| Cement, bricks, etc....   | 31,419                           | 810       |                                   |       |                                    |         |                                   |           |         | 3,552     | 35,871      | 33,129           | 2,742     |
| Coal, hard.....           |                                  |           |                                   |       | 236,976                            |         | 13,107                            |           | 250,083 |           | 250,083     |                  | 250,083   |
| “ soft.....               |                                  |           |                                   |       |                                    |         |                                   | 699,223   |         | 699,223   | 699,223     |                  | 699,223   |
| Corn.....                 |                                  | 5,835     |                                   |       |                                    | 85,700  |                                   | 20,598    |         | 112,133   | 112,133     | 560              | 111,573   |
| Flax.....                 |                                  | 16,873    |                                   |       |                                    |         |                                   |           |         | 16,873    | 20,657      | 20,657           |           |
| Flour.....                |                                  | 78,885    |                                   |       |                                    | 8,580   |                                   | 236       |         | 87,701    | 87,701      | 78,885           | 8,816     |
| Fruits and vegetables..   | 150                              |           |                                   |       |                                    |         |                                   |           | 150     |           | 150         | 150              |           |
| Iron, pig and bloom....   | 7,268                            | 830       |                                   |       |                                    |         |                                   | 2         | 7,268   | 832       | 8,100       | 8,098            | 2         |
| Iron and steel, all other | 21,800                           | 220       |                                   |       |                                    |         |                                   | 3,897     | 21,820  | 4,117     | 25,937      | 22,040           | 3,897     |
| Merchandise.....          | 75,824                           | 1,838     | 13,431                            |       | 70,052                             | 9,131   |                                   | 127       | 159,307 | 11,096    | 170,403     | 92,124           | 78,279    |
| Oats.....                 |                                  | 198,577   |                                   |       |                                    | 5,210   |                                   | 21,881    |         | 225,668   | 225,668     | 212,921          | 12,747    |
| Other mill products....   |                                  | 40        |                                   |       |                                    | 10,278  |                                   |           |         | 10,318    | 10,318      | 40               | 10,278    |
| Other pack, house prod.   | 45                               |           |                                   |       |                                    |         |                                   |           | 45      |           | 45          | 45               |           |
| Other woods.....          | 450                              | 1,144     |                                   |       |                                    | 1,650   |                                   |           | 450     | 2,794     | 3,244       | 1,594            | 1,650     |
| Ore, all other.....       | 120                              | 3,828     |                                   |       | 6,341                              |         |                                   |           | 6,461   | 3,828     | 10,289      | 3,948            | 6,341     |
| “ iron.....               |                                  | 200       |                                   |       |                                    |         |                                   | 3,662     |         | 3,862     | 3,862       | 200              | 3,662     |
| Petroleum.....            | 20                               | 58,445    |                                   |       | 83                                 |         |                                   | 15,442    | 103     | 73,887    | 73,990      | 58,465           | 15,525    |
| Poultry, game and fish    |                                  |           |                                   |       | 66                                 |         |                                   |           | 66      |           | 66          |                  | 66        |
| Pulpwood.....             | 70,390                           |           | 259,283                           |       |                                    |         |                                   |           | 329,673 |           | 329,673     | 329,673          |           |
| Rye.....                  |                                  | 1,114     |                                   |       |                                    |         |                                   | 9,106     |         | 10,220    | 10,220      | 5,340            | 4,880     |
| Sawn lumber.....          |                                  |           |                                   | 450   |                                    | 16,424  |                                   | 4,225     |         | 21,099    | 21,099      | 1,119            | 19,980    |
| Shingles.....             |                                  | 175       |                                   |       |                                    |         |                                   |           |         | 175       | 175         | 175              |           |
| Square timber.....        |                                  | 3,766     |                                   |       |                                    | 437     |                                   | 2,040     |         | 6,243     | 6,243       | 3,766            | 2,477     |
| Sugar.....                | 7,290                            | 2,262     |                                   |       | 24,858                             |         |                                   | 450       |         | 2,712     | 34,860      | 9,552            | 25,308    |
| Salt.....                 |                                  | 200       |                                   |       |                                    |         |                                   |           |         | 200       | 200         | 200              |           |
| Sand and stone.....       |                                  | 8,708     |                                   |       |                                    | 400     |                                   |           |         | 58,051    | 59,251      | 5,908            | 53,343    |
| Wheat.....                |                                  | 1,299,943 |                                   |       |                                    | 32,657  |                                   | 227,309   | 1,200   | 1,559,909 | 1,559,909   | 1,031,289        | 528,620   |
| Wines, liquors and beers  | 4,156                            | 448       |                                   |       | 79                                 | 157     |                                   | 200       | 4,438   | 805       | 5,243       | 4,807            | 436       |
| Wool.....                 | 30                               |           | 203                               |       |                                    |         |                                   |           | 164     |           | 164         | 164              |           |
| Total freight.....        | 225,532                          | 1,769,052 | 278,955                           | 450   | 338,455                            | 170,624 | 13,107                            | 1,064,794 | 856,049 | 3,004,920 | 3,860,969   | 2,013,619        | 1,847,350 |



TABLE 7, (No. 3).—GENERAL STATEMENT showing the Quantity of each Through Article transported on the Welland canal during the Season of Navigation in 1914.

| Articles.                 | From Canadian to Canadian Ports. |           | From Canadian to U. States Ports. |       | From U. States to U. States Ports. |         | From U. States to Canadian Ports. |           | Tons.   |           | Total     |  | Origin of Cargo. |           |
|---------------------------|----------------------------------|-----------|-----------------------------------|-------|------------------------------------|---------|-----------------------------------|-----------|---------|-----------|-----------|--|------------------|-----------|
|                           | Up.                              | Down.     | Up.                               | Down. | Up.                                | Down.   | Up.                               | Down.     | Up.     | Down.     |           |  | Canadian.        | U. S.     |
|                           |                                  |           |                                   |       |                                    |         |                                   |           |         |           |           |  |                  |           |
| Agricultural Implem'ts    | 6,570                            |           |                                   |       |                                    |         |                                   |           | 6,570   |           |           |  | 6,570            |           |
| Barley                    |                                  | 84,911    |                                   |       |                                    |         |                                   |           |         |           |           |  | 82,200           | 7,422     |
| Cement, bricks, etc.      | 31,419                           | 110       | 900                               |       |                                    |         |                                   |           | 32,319  |           |           |  | 32,429           |           |
| Coal, hard                |                                  |           |                                   |       |                                    |         |                                   |           | 250,083 |           |           |  |                  | 250,083   |
| " soft                    |                                  |           |                                   |       |                                    |         |                                   |           | 696,544 |           |           |  |                  | 696,544   |
| Corn                      |                                  | 5,835     |                                   |       |                                    | 85,700  |                                   |           |         | 112,133   |           |  | 560              | 111,573   |
| Flax                      |                                  | 16,873    |                                   |       |                                    |         |                                   |           |         | 16,873    |           |  | 20,657           |           |
| Flour                     |                                  | 78,885    | 3,784                             |       |                                    | 8,580   |                                   | 236       | 3,784   | 87,701    |           |  | 78,885           | 8,816     |
| Fruits and vegetables     | 150                              |           |                                   |       |                                    |         |                                   |           | 150     |           |           |  | 150              |           |
| Iron, pig and bloom       | 7,268                            | 830       |                                   |       |                                    |         |                                   | 2         | 7,268   | 832       |           |  | 8,098            | 2         |
| Iron and steel, all other | 21,800                           | 220       | 20                                |       |                                    |         |                                   | 3,987     | 21,820  | 4,117     |           |  | 22,040           | 3,897     |
| Merchandise               | 75,824                           | 1,838     | 13,431                            |       | 70,052                             | 9,131   | 127                               |           | 159,307 | 11,096    |           |  | 92,124           | 78,279    |
| Oats                      |                                  | 198,577   |                                   |       |                                    | 5,210   |                                   | 21,881    |         | 225,668   |           |  | 212,921          | 12,747    |
| Other mill products       |                                  | 40        |                                   |       |                                    | 10,278  |                                   |           |         | 10,318    |           |  | 40               | 10,278    |
| " Pack. house prod        | 45                               |           |                                   |       |                                    |         |                                   |           | 45      |           |           |  | 45               |           |
| " woods                   |                                  | 1,144     |                                   |       |                                    | 1,650   |                                   |           |         | 2,794     |           |  | 1,144            | 1,650     |
| Ore, all other            | 120                              | 2,000     |                                   |       | 6,341                              |         |                                   |           | 6,461   | 2,000     |           |  | 2,120            | 6,341     |
| Iron                      |                                  | 200       |                                   |       |                                    |         |                                   | 3,662     |         | 3,862     |           |  | 200              | 3,662     |
| Petroleum                 | 20                               | 57,559    |                                   |       | 83                                 |         |                                   | 15,442    | 103     | 73,001    |           |  | 57,579           | 15,525    |
| Poultry, game & fish.     |                                  |           |                                   |       | 66                                 |         |                                   |           | 66      |           |           |  |                  | 66        |
| Pulpwood                  | 3,150                            |           | 259,283                           |       |                                    |         |                                   |           | 262,433 |           |           |  | 262,433          |           |
| Rye                       |                                  | 1,114     |                                   |       |                                    |         |                                   | 9,106     |         | 10,220    |           |  | 5,340            | 4,880     |
| Sawed lumber              |                                  |           |                                   |       |                                    | 16,424  |                                   | 2,531     |         | 19,405    |           |  | 1,119            | 18,286    |
| Shingles                  |                                  | 175       |                                   |       |                                    |         |                                   |           |         | 175       |           |  | 175              |           |
| Square timber             |                                  | 3,766     |                                   |       |                                    | 437     |                                   | 2,040     |         | 6,243     |           |  | 3,766            | 2,477     |
| Sugar                     | 7,290                            | 2,262     |                                   |       | 24,858                             |         |                                   | 450       | 32,148  | 2,712     |           |  | 9,552            | 25,308    |
| Salt                      |                                  | 200       |                                   |       |                                    |         |                                   |           |         | 200       |           |  | 200              |           |
| Sand and stone            |                                  |           | 1,200                             |       |                                    | 400     |                                   |           | 1,200   | 400       |           |  | 1,200            | 400       |
| Wheat                     |                                  | 1,299,943 |                                   |       |                                    | 32,657  |                                   | 227,309   |         | 1,559,909 |           |  | 1,031,289        | 528,620   |
| Wines, liquors and beers  | 4,156                            | 448       | 203                               |       | 79                                 | 157     |                                   | 200       | 4,438   | 805       |           |  | 4,807            | 436       |
| Wool                      | 30                               |           | 134                               |       |                                    |         |                                   |           | 164     |           |           |  | 164              |           |
| Totals                    | 157,842                          | 1,756,930 | 278,955                           | 450   | 338,455                            | 170,624 | 13,107                            | 1,008,736 | 788,359 | 2,936,740 | 3,725,099 |  | 1,937,807        | 1,787,292 |



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TABLE 7, (No. 4).—GENERAL STATEMENT showing the Quantity of each Way Article transported on the Welland canal during the Season of Navigation in 1914.  
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| Articles.            | From Canadian to Canadian Ports. |        | From Canadian to U. States Ports. |       | From U. States to U. States Ports. |       | From U. States to Canadian Ports. |        | Tons.  |        | Total Tons. | Origin of Cargo. |        |
|----------------------|----------------------------------|--------|-----------------------------------|-------|------------------------------------|-------|-----------------------------------|--------|--------|--------|-------------|------------------|--------|
|                      | Up.                              | Down.  | Up.                               | Down. | Up.                                | Down. | Up.                               | Down.  | Up.    | Down.  |             | Canadian.        | U. S.  |
| Cement, bricks, etc. |                                  | 700    |                                   |       |                                    |       |                                   | 2,742  |        | 3,442  | 3,442       | 700              | 2,742  |
| Coal, soft.          |                                  |        |                                   |       |                                    |       |                                   | 2,679  |        | 2,679  | 2,679       |                  | 2,679  |
| Other woods.         | 450                              |        |                                   |       |                                    |       |                                   |        | 450    |        | 450         | 450              |        |
| Ore, all other.      |                                  | 1,828  |                                   |       |                                    |       |                                   |        |        | 1,828  | 1,828       | 1,828            |        |
| Petroleum.           |                                  | 886    |                                   |       |                                    |       |                                   |        |        | 886    | 886         | 886              |        |
| Pulpwood.            | 67,240                           |        |                                   |       |                                    |       |                                   |        | 67,240 |        | 67,240      | 67,240           |        |
| Sawed lumber.        |                                  |        |                                   |       |                                    |       |                                   | 1,694  |        | 1,694  | 1,694       |                  | 1,694  |
| Sand and stone.      |                                  | 8,708  |                                   |       |                                    |       |                                   | 48,943 |        | 57,651 | 57,651      | 4,708            | 52,943 |
| Total freight.       | 67,690                           | 12,122 |                                   |       |                                    |       |                                   | 56,058 | 67,690 | 68,180 | 135,870     | 75,812           | 60,05  |



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TABLE 7, (No. 5).—GENERAL STATEMENT showing the Quantity of each Article transported on the St. Lawrence canals during the Season of Navigation in 1914.

| Articles.                  | From Canadian to Canadian Ports. |           | From Canadian to U. States Ports. |       | From U. States to U. States Ports. |       | From U. States to Canadian Ports. |           | Tons.   |           | Total Tons. | Origin of Cargo. |           |
|----------------------------|----------------------------------|-----------|-----------------------------------|-------|------------------------------------|-------|-----------------------------------|-----------|---------|-----------|-------------|------------------|-----------|
|                            | Up.                              | Down.     | Up.                               | Down. | Up.                                | Down. | Up.                               | Down.     | Up.     | Down.     |             | Canadian.        | U. S.     |
| Agricultural implem'ts.    | 110                              | 5         |                                   | 10    | 1                                  |       |                                   |           | 111     | 15        | 126         | 125              | 1         |
| All other animals.         | 1,280                            | 3,912     |                                   |       | 8                                  |       |                                   |           | 1,289   | 3,912     | 5,201       | 5,201            |           |
| Barley.                    | 66                               | 85,413    | 1                                 |       |                                    |       |                                   | 6,196     | 66      | 91,609    | 91,675      | 87,519           | 4,156     |
| Buckwheat.                 | 8                                | 308       |                                   |       |                                    |       |                                   |           | 8       | 308       | 316         | 316              |           |
| Cement, bricks, etc.       | 42,661                           | 1,549     |                                   |       |                                    |       |                                   |           | 44,611  | 1,549     | 46,160      | 45,029           | 1,131     |
| Coal, hard.                | 676                              | 647       |                                   |       |                                    | 140   | 1,065                             | 445,874   | 1,741   | 446,661   | 448,402     | 526              | 447,876   |
| " soft.                    | 155,047                          | 1,060     |                                   | 280   |                                    |       |                                   | 642,731   | 155,047 | 644,071   | 799,118     | 157,972          | 641,146   |
| Coke.                      |                                  | 20        |                                   |       |                                    |       |                                   |           |         | 20        | 20          | 20               |           |
| Corn.                      | 9,214                            | 16,332    |                                   |       |                                    |       |                                   | 5,405     | 9,214   | 21,737    | 30,951      | 10,561           | 20,390    |
| Dressed meats.             | 4                                | 13        |                                   |       |                                    |       |                                   |           | 4       | 13        | 17          | 17               |           |
| Flax.                      |                                  | 17,786    |                                   |       |                                    |       |                                   |           | 3,784   | 17,786    | 21,570      | 21,570           |           |
| Flour.                     | 1,595                            | 96,556    |                                   |       |                                    |       |                                   |           | 1,595   | 96,556    | 98,151      | 98,151           |           |
| Fruits and vegetables.     | 849                              | 4,979     |                                   |       |                                    | 4     |                                   |           | 849     | 4,983     | 5,832       | 5,828            | 4         |
| Hay.                       | 6,156                            | 1,354     |                                   |       |                                    |       |                                   |           | 6,156   | 1,354     | 7,510       | 7,510            |           |
| Hides and leather.         | 15                               |           | 3                                 |       | 4                                  |       |                                   |           | 22      |           | 22          | 22               |           |
| Household goods.           | 864                              | 1,729     | 8                                 |       | 1                                  |       |                                   |           | 873     | 1,731     | 2,604       | 2,599            | 5         |
| Iron, pig and bloom.       | 4,947                            | 1,716     |                                   |       | 1                                  |       |                                   |           | 4,947   | 1,716     | 6,663       | 5,638            | 1,025     |
| Iron and steel, all other. | 38,750                           | 9,676     |                                   |       |                                    |       |                                   | 1,650     | 38,750  | 11,326    | 50,076      | 48,426           | 1,650     |
| Live stock.                | 68                               | 573       | 2                                 |       | 6                                  |       |                                   |           | 76      | 573       | 649         | 647              | 2         |
| Merchandise.               | 72,782                           | 27,625    | 5,310                             |       | 33                                 |       | 180                               |           | 78,305  | 27,625    | 105,930     | 103,964          | 1,966     |
| Oats.                      | 2,829                            | 195,871   |                                   |       |                                    |       |                                   |           | 2,829   | 206,875   | 209,704     | 203,908          | 5,796     |
| Other mill products.       | 263                              | 1,164     |                                   |       |                                    |       |                                   |           | 263     | 1,164     | 1,427       | 1,427            |           |
| " pack, house prod.        | 226                              | 505       |                                   |       |                                    |       |                                   |           | 226     | 525       | 751         | 751              |           |
| " woods.                   | 931                              | 15,235    |                                   | 20    |                                    |       |                                   |           | 931     | 15,235    | 16,166      | 16,166           |           |
| Ore, all other.            | 4,020                            |           |                                   |       |                                    |       |                                   |           | 4,020   |           | 4,020       | 120              | 3,900     |
| Peas.                      | 37                               |           |                                   |       |                                    |       | 3                                 |           | 40      |           | 40          | 40               |           |
| Petroleum.                 | 1,215                            | 36,051    |                                   |       |                                    |       |                                   | 15,926    | 1,215   | 49,977    | 51,192      | 39,323           | 11,869    |
| Poultry, game and fish.    | 1                                | 89        |                                   |       |                                    |       |                                   |           | 1       | 89        | 90          | 90               |           |
| Potatoes.                  | 135                              | 539       | 1                                 | 1     |                                    |       |                                   |           | 136     | 540       | 676         | 674              | 2         |
| Pulpwood.                  | 70,390                           | 35        | 401,951                           |       |                                    |       |                                   |           | 472,341 | 35        | 472,376     | 472,376          | 2,640     |
| Rye.                       |                                  | 6,335     |                                   |       |                                    |       |                                   | 3,052     |         | 9,387     | 9,387       | 6,747            |           |
| Sawed lumber.              | 42,533                           | 121,512   | 4                                 |       |                                    |       |                                   |           | 42,537  | 121,512   | 164,049     | 164,045          | 4         |
| Shingles.                  | 2                                | 209       | 1                                 |       |                                    |       |                                   |           | 3       | 209       | 212         | 212              |           |
| Square timber.             | 24                               | 10,911    |                                   |       |                                    |       |                                   | 5,037     | 24      | 15,948    | 15,972      | 12,083           | 3,889     |
| Sugar.                     | 20,322                           | 2,940     |                                   |       |                                    |       |                                   |           | 20,322  | 2,940     | 23,262      | 23,262           |           |
| Salt.                      | 2,207                            | 598       |                                   |       |                                    |       | 168                               |           | 2,375   | 598       | 2,973       | 2,637            | 336       |
| Sand and stone.            | 70,347                           | 76,602    |                                   |       |                                    |       |                                   |           | 70,347  | 76,602    | 146,949     | 144,298          | 2,651     |
| Wheat.                     | 13,316                           | 984,529   |                                   |       |                                    |       |                                   | 544,951   | 13,316  | 1,529,480 | 1,542,796   | 1,040,391        | 502,405   |
| Wines, liquors and beers.  | 7,407                            | 816       |                                   | 60    |                                    |       |                                   |           | 7,407   | 876       | 8,283       | 8,283            |           |
| Wool.                      | 34                               | 2         | 134                               |       | 5                                  |       |                                   |           | 173     | 2         | 175         | 175              |           |
| Total freight.....         | 571,331                          | 1,725,196 | 413,149                           | 91    | 58                                 | 424   | 1,416                             | 1,679,828 | 985,954 | 3,405,539 | 4,391,493   | 2,738,649        | 1,652,844 |



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TABLE 7, (No. 6).—GENERAL STATEMENT showing the Quantity of each Through Article transported on the St. Lawrence canals during the Season of Navigation in 1914.

| Articles.                  | From Canadian to Canadian Ports. |           | From Canadian to U. States Ports. |       | From U. States to U. States Ports. |       | From U. States to Canadian Ports. |           | Tons.   |           | Total Tons. | Origin of Cargo. |           |
|----------------------------|----------------------------------|-----------|-----------------------------------|-------|------------------------------------|-------|-----------------------------------|-----------|---------|-----------|-------------|------------------|-----------|
|                            | Up.                              | Down.     | Up.                               | Down. | Up.                                | Down. | Up.                               | Down.     | Up.     | Down.     |             | Canadian.        | U. S.     |
| All other animals.....     | 409                              | 1,242     |                                   |       |                                    |       |                                   |           | 409     | 1,242     | 1,651       | 1,651            |           |
| Barley.....                |                                  | 84,409    |                                   |       |                                    |       |                                   | 6,196     |         | 90,605    | 90,605      | 86,449           | 4,156     |
| Buckwheat.....             |                                  | 308       |                                   |       |                                    |       |                                   |           |         | 308       | 308         | 308              |           |
| Cement, bricks, etc.....   | 20,148                           | 110       |                                   |       |                                    |       |                                   |           | 22,098  | 110       | 22,208      | 22,208           |           |
| Coal, hard.....            |                                  |           |                                   |       |                                    |       |                                   | 421,331   |         | 421,331   | 421,331     |                  | 421,331   |
| “ soft.....                | 7,750                            |           |                                   |       |                                    |       |                                   | 616,796   | 7,750   | 616,796   | 624,546     | 7,750            | 616,796   |
| Corn.....                  | 1,306                            | 626       |                                   |       |                                    |       |                                   | 5,405     | 1,306   | 6,031     | 7,337       | 1,932            | 5,405     |
| Flax.....                  |                                  | 17,786    |                                   |       |                                    |       |                                   |           | 3,784   | 17,786    | 21,570      | 21,570           |           |
| Flour.....                 | 2                                | 77,080    |                                   |       |                                    |       |                                   |           | 2       | 77,080    | 77,082      | 77,082           |           |
| Fruits and vegetables..... | 546                              | 4,323     |                                   |       |                                    |       |                                   |           | 546     | 4,323     | 4,869       | 4,869            |           |
| Hay.....                   |                                  | 135       |                                   |       |                                    |       |                                   |           |         | 135       | 135         | 135              |           |
| Hides and leather.....     | 10                               |           |                                   |       |                                    |       |                                   |           | 10      |           | 10          | 10               |           |
| Household goods.....       | 589                              | 1,430     |                                   |       |                                    |       |                                   |           | 589     | 1,430     | 2,019       | 2,019            |           |
| Iron, pig and bloom..      | 1,906                            | 481       |                                   |       |                                    |       |                                   |           | 1,906   | 481       | 2,387       | 2,387            |           |
| Iron and steel, all other. | 20,682                           | 721       |                                   |       |                                    |       |                                   | 1,650     | 20,682  | 2,371     | 23,053      | 21,403           | 1,650     |
| Live stock.....            | 2                                | 7         |                                   |       |                                    |       |                                   |           | 2       | 7         | 9           | 9                |           |
| Merchandise.....           | 61,663                           | 18,774    |                                   |       |                                    |       |                                   |           | 66,770  | 18,774    | 85,544      | 85,544           |           |
| Oats.....                  |                                  | 193,162   |                                   |       |                                    |       |                                   | 11,004    |         | 204,166   | 204,166     | 198,370          | 5,796     |
| Other mill products.....   | 41                               | 238       |                                   |       |                                    |       |                                   |           | 41      | 238       | 279         | 279              |           |
| “ pack, house prod.        | 14                               | 367       |                                   |       |                                    |       |                                   |           | 14      | 367       | 381         | 381              |           |
| “ woods.....               |                                  | 1,064     |                                   |       |                                    |       |                                   |           |         | 1,064     | 1,064       | 1,064            |           |
| Petroleum.....             | 380                              | 35,475    |                                   |       |                                    |       |                                   | 13,926    | 380     | 49,401    | 49,781      | 38,102           | 11,679    |
| Poultry, game and fish.    |                                  | 47        |                                   |       |                                    |       |                                   |           |         | 47        | 47          | 47               |           |
| Pulpwood.....              | 70,390                           |           |                                   |       |                                    |       |                                   |           | 472,341 |           | 472,341     | 472,341          |           |
| Rye.....                   |                                  | 6,333     |                                   |       |                                    |       |                                   | 3,052     |         | 9,385     | 9,385       | 6,745            | 2,640     |
| Sawed lumber.....          | 5,061                            |           |                                   |       |                                    |       |                                   |           | 5,061   |           | 5,061       | 5,061            |           |
| Shingles.....              |                                  | 175       |                                   |       |                                    |       |                                   |           |         | 175       | 175         | 175              |           |
| Square timber.....         |                                  | 7,870     |                                   |       |                                    |       |                                   | 5,037     |         | 12,907    | 12,907      | 9,018            | 3,889     |
| Sugar.....                 | 14,352                           | 2,812     |                                   |       |                                    |       |                                   |           | 14,352  | 2,812     | 17,164      | 17,164           |           |
| Salt.....                  | 107                              | 100       |                                   |       |                                    |       |                                   |           | 107     | 100       | 207         | 207              |           |
| Wheat.....                 | 870                              | 982,358   |                                   |       |                                    |       |                                   | 544,951   | 870     | 1,527,309 | 1,528,179   | 1,025,774        | 502,405   |
| Wines, liquors and beers   | 6,238                            | 656       |                                   |       |                                    |       |                                   |           | 6,238   | 716       | 6,954       | 6,954            |           |
| Wool.....                  | 30                               |           |                                   |       |                                    |       |                                   |           | 164     |           | 164         | 164              |           |
| Total freight.....         | 212,496                          | 1,438,089 |                                   |       |                                    |       |                                   | 1,629,348 | 625,422 | 3,067,497 | 3,692,919   | 2,117,172        | 1,575,747 |



TABLE 7. (No. 7).—(GENERAL STATEMENT showing the Quantity of each Way Article transported on the St. Lawrence canals during the Season of Navigation in 1914.

| Articles.                  | From Canadian to Canadian Ports. |         | From Canadian to U. States Ports. |       | From U. States to U. States Ports. |       | From U. States to Canadian Ports. |        | Tons.   |         | Total Tons. | Origin of Cargo. |        |
|----------------------------|----------------------------------|---------|-----------------------------------|-------|------------------------------------|-------|-----------------------------------|--------|---------|---------|-------------|------------------|--------|
|                            | Up.                              |         | Down.                             |       | Up.                                |       | Down.                             |        | Up.     | Down.   |             | Canadian.        | U. S.  |
|                            | Up.                              | Down.   | Up.                               | Down. | Up.                                | Down. | Up.                               | Down.  |         |         |             |                  |        |
| Agricultural implem'ts.    | 110                              | 5       |                                   | 10    | 1                                  |       |                                   |        | 111     | 15      | 126         | 125              | 1      |
| All other animal.          | 871                              | 1,670   | 1                                 |       | 8                                  |       |                                   |        | 880     | 2,670   | 3,550       | 3,550            |        |
| Barley                     | 66                               | 1,004   |                                   |       |                                    |       |                                   |        | 66      | 1,004   | 1,070       | 1,070            |        |
| Buckwheat.                 | 8                                |         |                                   |       |                                    |       |                                   |        | 8       |         | 8           | 8                |        |
| Cement, bricks, etc.       | 22,513                           | 1,439   |                                   |       |                                    |       |                                   |        | 22,513  | 1,439   | 23,952      | 22,821           | 1,131  |
| Coal, Hard                 | 676                              | 647     |                                   |       |                                    |       | 140                               | 24,543 | 1,741   | 25,330  | 27,071      | 526              | 26,544 |
| " Soft                     | 147,297                          | 1,060   |                                   |       |                                    |       | 280                               | 25,935 | 147,297 | 27,275  | 174,572     | 150,222          | 24,350 |
| Coke.                      | 20                               | 20      |                                   |       |                                    |       |                                   |        | 20      | 20      | 20          | 20               |        |
| Corn.                      | 7,908                            | 15,706  |                                   |       |                                    |       |                                   |        | 7,908   | 15,706  | 23,614      | 8,629            | 14,985 |
| Dressed meats              | 4                                | 13      |                                   |       |                                    |       |                                   |        | 4       | 13      | 17          | 17               |        |
| Flour...                   | 1,593                            | 19,476  |                                   |       |                                    |       |                                   |        | 1,593   | 19,476  | 21,069      | 21,069           |        |
| Fruits and vegetables.     | 303                              | 656     |                                   |       |                                    |       | 4                                 |        | 303     | 606     | 963         | 939              | 4      |
| Hay.                       | 6,156                            | 1,219   |                                   |       |                                    |       |                                   |        | 6,156   | 1,219   | 7,375       | 7,375            |        |
| Hides and leather.         | 5                                |         | 3                                 |       | 4                                  |       |                                   |        | 12      |         | 12          | 12               |        |
| Household goods.           | 275                              | 299     | 8                                 |       | 1                                  |       | 2                                 |        | 284     | 301     | 585         | 580              | 5      |
| Iron, pig and bloom.       | 3,041                            | 1,235   |                                   |       |                                    |       |                                   |        | 3,041   | 1,235   | 4,276       | 3,251            | 1,025  |
| Iron and steel, all other. | 18,068                           | 8,955   |                                   |       |                                    |       |                                   |        | 18,068  | 8,955   | 27,023      | 27,023           |        |
| Live stock.                | 66                               | 566     | 2                                 |       | 6                                  |       |                                   |        | 74      | 566     | 640         | 638              | 2      |
| Merchandise.               | 11,119                           | 8,851   | 203                               |       | 33                                 |       | 180                               |        | 11,535  | 8,851   | 20,386      | 18,420           | 1,966  |
| Oats.                      | 2,829                            | 2,709   |                                   |       |                                    |       |                                   |        | 2,829   | 2,709   | 5,538       | 5,538            |        |
| Other mill products.       | 222                              | 926     |                                   |       |                                    |       |                                   |        | 222     | 926     | 1,148       | 1,148            |        |
| " pack.houseprod.          | 212                              | 138     |                                   | 20    |                                    |       |                                   |        | 212     | 158     | 370         | 370              |        |
| " woods.                   | 931                              | 14,171  |                                   |       |                                    |       |                                   |        | 931     | 14,171  | 15,102      | 15,102           |        |
| Ore, all other.            | 1,020                            |         |                                   |       |                                    |       |                                   |        | 4,020   |         | 4,020       | 120              | 3,900  |
| Peas.                      | 37                               | 3       |                                   |       |                                    |       |                                   |        | 37      | 3       | 40          | 40               |        |
| Petroleum.                 | 835                              | 576     |                                   |       |                                    |       |                                   |        | 835     | 576     | 1,411       | 1,211            | 190    |
| Poultry, game and fish.    | 1                                | 42      |                                   |       |                                    |       |                                   |        | 1       | 42      | 43          | 43               |        |
| Potatoes.                  | 135                              | 539     |                                   |       | 1                                  |       | 1                                 |        | 136     | 540     | 676         | 674              | 2      |
| Pulpwood.                  |                                  | 35      |                                   |       |                                    |       |                                   |        |         | 35      | 35          | 35               |        |
| Rye.                       |                                  | 2       |                                   |       |                                    |       |                                   |        |         | 2       | 2           | 2                |        |
| Sawed lumber.              | 37,472                           | 121,512 | 4                                 |       |                                    |       |                                   |        | 37,476  | 121,512 | 158,988     | 158,984          | 4      |
| Shingles.                  | 2                                | 34      | 1                                 |       |                                    |       |                                   |        | 3       | 34      | 37          | 37               |        |
| Square timber.             | 24                               | 3,041   |                                   |       |                                    |       |                                   |        | 24      | 3,041   | 3,065       | 3,065            |        |
| Sugar.                     | 5,970                            | 128     |                                   |       |                                    |       |                                   |        | 5,970   | 128     | 6,098       | 6,098            |        |
| Salt.                      | 2,100                            | 498     |                                   |       |                                    |       | 168                               |        | 2,268   | 498     | 2,766       | 2,430            | 336    |
| Sand and stone.            | 70,347                           | 76,602  |                                   |       |                                    |       |                                   |        | 70,347  | 76,602  | 146,949     | 144,298          | 2,651  |
| Wheat.                     | 12,446                           | 2,171   |                                   |       |                                    |       |                                   |        | 12,446  | 2,171   | 14,617      | 14,617           |        |
| Wines, liquors and beers.  | 1,169                            | 160     |                                   |       |                                    |       |                                   |        | 1,169   | 160     | 1,329       | 1,329            |        |
| Wool.                      | 4                                | 2       | 5                                 |       |                                    |       |                                   |        | 9       | 2       | 11          | 11               |        |
| Total freight.             | 358,835                          | 287,110 | 227                               | 30    | 54                                 | 425   | 1,413                             | 50,480 | 360,529 | 338,045 | 698,574     | 621,477          | 77,097 |



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TABLE 7, (No. 8).—GENERAL STATEMENT showing the Quantity of each Article transported on the Chambly canal during the Season of Navigation in 1914.

| Articles.                  | From Canadian to Canadian Ports. |       | From Canadian to U. States Ports. |       | From U. States to U. States Ports. |       | From U. States to Canadian Ports. |         | Tons.   |         | Total Tons. | Origin of Cargo. |         |
|----------------------------|----------------------------------|-------|-----------------------------------|-------|------------------------------------|-------|-----------------------------------|---------|---------|---------|-------------|------------------|---------|
|                            | Up.                              | Down. | Up.                               | Down. | Up.                                | Down. | Up.                               | Down.   | Up.     | Down.   |             | Canadian.        | U. S.   |
| Agricultural implem'ts.    |                                  |       |                                   |       |                                    |       |                                   |         |         |         |             |                  |         |
| Barley.....                | 87                               | 6     |                                   |       |                                    |       |                                   |         | 87      | 6       | 93          | 93               |         |
| Cement, bricks, etc....    | 1                                |       |                                   |       |                                    |       |                                   |         | 1       |         | 1           | 1                | 284     |
| Coal, hard.....            | 332                              |       |                                   |       |                                    |       |                                   | 284     | 332     | 284     | 616         | 332              |         |
| “ soft.....                | 60                               |       |                                   |       |                                    |       |                                   | 118,500 | 60      | 118,500 | 118,560     | 60               | 118,500 |
| Corn.....                  |                                  |       |                                   |       |                                    |       |                                   | 6       |         | 6       | 6           | 6                |         |
| Flour.....                 | 17                               |       |                                   |       |                                    |       |                                   |         | 17      |         | 17          | 17               |         |
| Fruits and vegetables      | 657                              | 38    |                                   |       |                                    |       |                                   |         | 657     | 38      | 695         | 695              |         |
| Hay.....                   | 473                              | 1,545 |                                   |       |                                    |       |                                   |         | 473     | 1,545   | 2,018       | 2,018            |         |
| Household goods.....       | 190                              | 3,950 |                                   |       |                                    |       |                                   |         | 713     | 3,950   | 4,663       | 4,663            |         |
| Iron, pig and bloom....    | 65                               | 30    |                                   |       |                                    |       |                                   |         | 65      | 30      | 95          | 95               |         |
| Iron and steel, all other. | 66                               | 2     |                                   |       |                                    |       |                                   |         | 66      | 2       | 733         | 68               | 665     |
| Live stock.....            | 515                              | 9     |                                   |       |                                    |       |                                   |         | 515     | 9       | 1,557       | 524              | 1,033   |
| Merchandise.....           | 22                               | 433   |                                   |       |                                    |       |                                   |         | 22      | 433     | 174         | 174              |         |
| Oats.....                  | 358                              | 1,408 |                                   |       |                                    |       |                                   |         | 2,403   | 4,522   | 6,925       | 2,836            | 4,089   |
| Other mill products....    | 11                               | 41    |                                   |       |                                    |       |                                   |         | 11      | 41      | 1,419       | 1,419            |         |
| “ pack-house prod.         | 305                              |       |                                   |       |                                    |       |                                   |         | 305     |         | 346         | 346              |         |
| “ woods.....               | 20                               |       |                                   |       |                                    |       |                                   |         | 20      |         | 20          | 20               |         |
| Ore, all other.....        | 60                               |       |                                   |       |                                    |       |                                   |         | 60      |         | 287         | 287              |         |
| Peas.....                  | 5                                |       |                                   |       |                                    |       |                                   |         | 5       |         | 636         | 465              | 171     |
| Petroleum.....             |                                  |       |                                   |       |                                    |       |                                   |         |         |         | 2           | 2                |         |
| Poultry, game and fish.    | 63                               |       |                                   |       |                                    |       |                                   |         | 63      |         | 65          | 65               |         |
| Potatoes.....              |                                  |       |                                   |       |                                    |       |                                   |         |         |         | 17          | 17               |         |
| Pulpwood.....              | 3                                |       |                                   |       |                                    |       |                                   |         | 3       |         | 85          | 85               |         |
| Sawn lumber.....           |                                  |       |                                   |       |                                    |       |                                   |         |         |         |             |                  |         |
| Shingles.....              | 57                               |       |                                   |       |                                    |       |                                   |         | 188,605 |         | 188,605     | 188,605          |         |
| Square timber.....         |                                  |       |                                   |       |                                    |       |                                   |         | 103,142 |         | 104,178     | 104,178          |         |
| Sugar.....                 |                                  |       |                                   |       |                                    |       |                                   |         |         |         | 27          | 27               |         |
| Salt.....                  | 88                               |       |                                   |       |                                    |       |                                   |         |         |         | 145         | 145              | 145     |
| Sand and stone.....        | 530                              |       |                                   |       |                                    |       |                                   |         |         |         | 103         | 103              |         |
| Wheat.....                 | 300                              |       |                                   |       |                                    |       |                                   |         | 88      |         | 532         | 532              | 336     |
| Wines, liquors and beer.   | 50                               |       |                                   |       |                                    |       |                                   |         | 530     |         | 868         | 300              | 3,591   |
| Wool.....                  |                                  |       |                                   |       |                                    |       |                                   |         | 300     |         | 3,891       | 2                |         |
|                            |                                  |       |                                   |       |                                    |       |                                   |         | 50      |         | 56          | 56               |         |
| Total freight.....         | 4,335                            | 8,492 |                                   |       |                                    |       |                                   |         | 299,593 | 137,312 | 436,905     | 308,091          | 128,814 |
|                            |                                  |       |                                   |       |                                    |       |                                   |         | 128,820 |         |             |                  |         |



TABLE 7, No. 9. — GENERAL STATEMENT showing the Quantity of each Article transported on the St. Peter's canal during the Season of Navigation in 1914.

| Articles.                  | From Canadian to Canadian Ports. |        | From Canadian to U. States Ports. |       | From U. States to U. States Ports. |       | From U. States to Canadian Ports. |       | Tons.  |        | Total Tons. | Origin of Cargo. |       |
|----------------------------|----------------------------------|--------|-----------------------------------|-------|------------------------------------|-------|-----------------------------------|-------|--------|--------|-------------|------------------|-------|
|                            | Up.                              | Down.  | Up.                               | Down. | Up.                                | Down. | Up.                               | Down. | Up.    | Down.  |             | Canadian.        | U. S. |
| Agricultural implem'ts.    | 15                               |        |                                   |       |                                    |       |                                   |       | 15     |        | 15          |                  |       |
| All other animals.         | 27                               | 1      |                                   |       |                                    |       |                                   |       | 27     | 1      | 28          |                  |       |
| Barley.                    | 17                               |        |                                   |       |                                    |       |                                   |       | 17     |        | 17          |                  |       |
| Cement, bricks, etc.       | 196                              | 9      |                                   |       |                                    |       |                                   |       | 196    | 9      | 205         |                  |       |
| Coal, hard.                | 170                              | 2      |                                   |       |                                    |       |                                   |       | 170    | 2      | 172         |                  |       |
| "    soft.                 | 36                               | 27,566 |                                   |       |                                    |       |                                   |       | 36     | 27,566 | 27,602      |                  |       |
| Corn.                      | 11                               |        |                                   |       |                                    |       |                                   |       | 11     |        | 11          |                  |       |
| Dressed meats.             | 27                               |        |                                   |       |                                    |       |                                   |       | 27     |        | 27          |                  |       |
| Flour.                     | 562                              | 61     |                                   |       |                                    |       |                                   |       | 562    | 61     | 623         |                  |       |
| Fruits and vegetables.     | 1,292                            | 10     |                                   |       |                                    |       |                                   |       | 1,292  | 10     | 1,302       |                  |       |
| Hay.                       | 1,121                            | 10     |                                   |       |                                    |       |                                   |       | 1,121  | 10     | 1,131       |                  |       |
| Household goods.           | 25                               | 16     |                                   |       |                                    |       |                                   |       | 25     | 16     | 41          |                  |       |
| Iron and steel, all other. | 110                              | 55     |                                   |       |                                    |       |                                   |       | 110    | 55     | 165         |                  |       |
| Live stock.                | 18                               | 3      |                                   |       |                                    |       |                                   |       | 18     | 3      | 21          |                  |       |
| Merchandise.               | 1,918                            | 527    |                                   |       |                                    |       |                                   |       | 1,918  | 527    | 2,445       |                  | 16    |
| Oats.                      | 2,379                            | 64     |                                   |       |                                    |       |                                   |       | 2,379  | 64     | 2,443       |                  |       |
| Other mill products.       | 534                              | 50     |                                   |       |                                    |       |                                   |       | 534    | 50     | 584         |                  |       |
| "    pack, house prod.     | 173                              | 10     |                                   |       |                                    |       |                                   |       | 173    | 10     | 183         |                  |       |
| "    woods.                | 511                              | 309    |                                   |       |                                    |       |                                   |       | 511    | 309    | 820         |                  |       |
| Peas.                      | 10                               |        |                                   |       |                                    |       |                                   |       | 10     |        | 10          |                  |       |
| Petroleum.                 | 391                              | 58     |                                   |       |                                    |       |                                   |       | 391    | 58     | 449         |                  |       |
| Poultry, game and fish.    | 280                              | 1,004  |                                   |       |                                    |       |                                   |       | 280    | 1,004  | 1,284       |                  |       |
| Potatoes.                  | 5,719                            | 1      |                                   |       |                                    |       |                                   |       | 5,719  | 1      | 5,720       |                  |       |
| Sawed lumber.              | 1,293                            | 557    |                                   |       |                                    |       |                                   |       | 1,293  | 557    | 1,850       |                  |       |
| Shingles.                  | 166                              | 21     |                                   |       |                                    |       |                                   |       | 166    | 21     | 187         |                  |       |
| Square timber.             | 269                              |        |                                   |       |                                    |       |                                   |       | 269    |        | 269         |                  |       |
| Sugar.                     | 143                              | 12     |                                   |       |                                    |       |                                   |       | 143    | 12     | 155         |                  |       |
| Salt.                      | 509                              | 21     |                                   |       |                                    |       |                                   |       | 509    | 21     | 530         |                  |       |
| Sand.                      | 3,759                            | 2,016  |                                   |       |                                    |       |                                   |       | 3,759  | 2,016  | 5,775       |                  |       |
| Wheat.                     | 4                                |        |                                   |       |                                    |       |                                   |       | 4      |        | 4           |                  |       |
| Wines, liquors and beers.  | 108                              | 4      |                                   |       |                                    |       |                                   |       | 108    | 4      | 112         |                  |       |
| Total freight.             | 21,793                           | 32,387 |                                   |       |                                    |       |                                   |       | 21,793 | 32,387 | 54,180      | 54,164           | 16    |



TABLE 7, No. 10.—GENERAL STATEMENT showing the Quantity of each Article transported on the Murray canal during the Season of Navigation in 1914.

| Articles.                  | From Canadian to Canadian Ports. |       | From Canadian to U. States Ports. |       | From U. States to U. States Ports. |       | From U. States to Canadian Ports. |       | Tons.  |       | Total Tons. | Origin of Cargo. |       |
|----------------------------|----------------------------------|-------|-----------------------------------|-------|------------------------------------|-------|-----------------------------------|-------|--------|-------|-------------|------------------|-------|
|                            | Up.                              | Down. | Up.                               | Down. | Up.                                | Down. | Up.                               | Down. | Up.    | Down. |             | Canadian.        | U. S. |
|                            |                                  |       |                                   |       |                                    |       |                                   |       |        |       |             |                  |       |
| Cement, bricks, etc.....   | 13,030                           | ..... | .....                             | ..... | .....                              | ..... | .....                             | ..... | 13,870 | ..... | 13,870      | 13,870           | ..... |
| Coal, hard.....            | .....                            | ..... | .....                             | ..... | .....                              | ..... | .....                             | ..... | .....  | ..... | .....       | 500              | 2,208 |
| “ soft.....                | 50                               | 550   | .....                             | ..... | .....                              | ..... | .....                             | ..... | .....  | ..... | .....       | 600              | 750   |
| Fruits and vegetables..    | 62                               | 87    | .....                             | ..... | .....                              | ..... | .....                             | ..... | 50     | 1,300 | 1,350       | 149              | ..... |
| Iron and steel, all other. | 40                               | ..... | .....                             | ..... | .....                              | ..... | .....                             | ..... | 62     | 87    | 40          | 40               | ..... |
| Merchandise.....           | 5,283                            | 2,201 | .....                             | ..... | .....                              | ..... | .....                             | ..... | .....  | ..... | .....       | 7,481            | 3     |
| Other woods.....           | 360                              | ..... | .....                             | ..... | .....                              | ..... | .....                             | ..... | 5,283  | 2,201 | 7,484       | 360              | ..... |
| Petroleum.....             | 85                               | 50    | .....                             | ..... | .....                              | ..... | .....                             | ..... | 360    | ..... | 360         | 135              | ..... |
| Square timber.....         | 20                               | 50    | .....                             | ..... | .....                              | ..... | .....                             | ..... | 85     | 50    | 135         | 70               | ..... |
| Sand and stone.....        | 57,015                           | ..... | .....                             | ..... | .....                              | ..... | .....                             | ..... | 20     | 50    | 70          | 57,665           | ..... |
| Wines, liquors and beers   | 76                               | ..... | .....                             | ..... | .....                              | ..... | .....                             | ..... | 57,665 | ..... | 57,665      | 76               | ..... |
| Total freight.....         | 76,021                           | 2,938 | 1,490                             | ..... | .....                              | ..... | .....                             | 3,458 | 77,511 | 6,396 | 83,907      | 80,946           | 2,961 |



TABLE 7, No. 11. GENERAL STATEMENT showing the Quantity of each Article transported on the Ottawa canals during the Season of Navigation in 1914.

| Articles.                  | From Canadian to Canadian Ports. |         | From Canadian to U. States Ports. |        | From U. States to U. States Ports. |       | From U. States to Canadian Ports. |       | Tons.  |         | Total   | Origin of Cargo. |        |
|----------------------------|----------------------------------|---------|-----------------------------------|--------|------------------------------------|-------|-----------------------------------|-------|--------|---------|---------|------------------|--------|
|                            | Up.                              | Down.   | Up.                               | Down.  | Up.                                | Down. | Up.                               | Down. | Up.    | Down.   |         | Canadian.        | U. S.  |
| Agricultural implem'ts.    | 93                               | 21      |                                   |        |                                    |       |                                   |       | 93     | 21      | 114     | 114              | ..     |
| All other animals          | 70                               | 2,480   |                                   |        |                                    |       |                                   |       | 70     | 2,480   | 2,550   | 2,550            | ..     |
| Barley.....                | 6                                |         |                                   |        |                                    |       |                                   |       | 6      |         | 6       | 6                | ..     |
| Cement, bricks, etc.       | 2,814                            | 86      |                                   |        |                                    |       |                                   |       | 2,814  | 86      | 2,900   | 2,857            | 43     |
| Coal, hard.....            | 937                              |         |                                   |        |                                    |       | 3,723                             |       | 4,660  |         | 4,660   | 4,660            | ..     |
| " soft.....                | 36,880                           | 13      |                                   |        |                                    |       |                                   |       | 36,880 | 13      | 36,893  | 36,893           | ..     |
| Corn.....                  | 21                               |         |                                   |        |                                    |       |                                   |       | 21     |         | 21      | 21               | ..     |
| Dressed meats.....         | 1                                | 2       |                                   |        |                                    |       |                                   |       | 1      | 2       | 3       | 3                | ..     |
| Flour.....                 | 483                              | 16      |                                   |        |                                    |       |                                   |       | 483    | 16      | 499     | 499              | ..     |
| Fruits and vegetables      | 116                              | 492     |                                   |        |                                    |       |                                   |       | 116    | 492     | 608     | 608              | ..     |
| Hay.....                   | 1                                | 292     |                                   |        |                                    |       |                                   |       | 1      | 292     | 293     | 293              | ..     |
| Household goods.....       | 146                              | 57      |                                   |        |                                    |       |                                   |       | 146    | 57      | 203     | 203              | ..     |
| Iron, pig and bloom        | 955                              | 17      |                                   |        |                                    |       |                                   |       | 955    | 17      | 972     | 972              | ..     |
| Iron and steel, all other. | 131                              | 13      |                                   |        |                                    |       |                                   |       | 131    | 13      | 144     | 144              | ..     |
| Live stock.....            | 22                               | 395     |                                   |        |                                    |       |                                   |       | 22     | 395     | 417     | 417              | ..     |
| Merchandise.....           | 7,842                            | 3,791   |                                   |        |                                    |       | 203                               |       | 8,045  | 3,791   | 11,836  | 10,366           | 1,470  |
| Oats.....                  | 83                               | 265     |                                   |        |                                    |       |                                   |       | 83     | 265     | 348     | 348              | ..     |
| Other mill products.....   | 152                              | 418     |                                   |        |                                    |       |                                   |       | 152    | 418     | 570     | 570              | ..     |
| " pack-house prod.         | 101                              | 68      |                                   |        |                                    |       |                                   |       | 101    | 68      | 169     | 169              | ..     |
| " woods.....               | 3                                | 38,646  |                                   |        |                                    |       |                                   |       | 3      | 38,646  | 38,649  | 38,649           | ..     |
| Ore, all other.....        | 3,900                            |         |                                   |        |                                    |       |                                   |       | 3,900  |         | 3,900   | 3,900            | ..     |
| Peas.....                  | 5                                |         |                                   |        |                                    |       |                                   |       | 5      |         | 5       | 5                | ..     |
| Petroleum.....             | 146                              | 132     |                                   |        |                                    |       |                                   |       | 446    | 132     | 578     | 578              | ..     |
| Poultry, game and fish.    |                                  | 44      |                                   |        |                                    |       |                                   |       |        | 44      | 44      | 44               | ..     |
| Potatoes.....              | 8                                | 544     |                                   |        |                                    |       |                                   |       | 8      | 544     | 552     | 552              | ..     |
| Sawn lumber.....           | 112                              | 96,684  |                                   |        |                                    |       |                                   |       | 112    | 131,571 | 131,683 | 131,683          | ..     |
| Shingles.....              |                                  | 36      |                                   |        |                                    |       |                                   |       |        | 36      | 36      | 36               | ..     |
| Square timber.....         |                                  | 400     |                                   |        |                                    |       |                                   |       |        | 1,072   | 1,072   | 1,072            | ..     |
| Sugar.....                 | 436                              | 54      |                                   |        |                                    |       |                                   |       | 436    | 54      | 490     | 490              | ..     |
| Salt.....                  | 740                              | 11      |                                   |        |                                    |       |                                   |       | 740    | 11      | 751     | 751              | ..     |
| Sand and stone.....        | 75                               | 93,286  |                                   |        |                                    |       |                                   |       | 75     | 93,286  | 93,361  | 93,361           | ..     |
| Wheat.....                 | 130                              |         |                                   |        |                                    |       |                                   |       | 130    |         | 130     | 130              | ..     |
| Wines, liquors and beers   | 621                              | 54      |                                   |        |                                    |       |                                   |       | 621    | 54      | 675     | 675              | ..     |
| Wool.....                  |                                  |         |                                   |        |                                    |       |                                   |       |        |         |         |                  | ..     |
| Total freight              | 57,330                           | 238,317 |                                   | 35,559 |                                    |       | 3,926                             |       | 61,256 | 273,876 | 335,132 | 325,059          | 10,073 |



TABLE 7, No. 12.—GENERAL STATEMENT showing the Quantity of each Article transported on the Rideau canal during the Season of Navigation in 1914.

| Articles.                 | From Canadian to Canadian Ports. |        | From Canadian to U. States Ports. |       | From U. States to U. States Ports. |       | From U. States to Canadian Ports. |       | Tons.  |        | Total   | Origin of Cargo. |       |
|---------------------------|----------------------------------|--------|-----------------------------------|-------|------------------------------------|-------|-----------------------------------|-------|--------|--------|---------|------------------|-------|
|                           | Up.                              | Down.  | Up.                               | Down. | Up.                                | Down. | Up.                               | Down. | Up.    | Down.  |         | Canadian.        | U. S. |
|                           |                                  |        |                                   |       |                                    |       |                                   |       |        |        |         |                  |       |
| Agricultural implem'ts.   | 403                              | 185    |                                   |       |                                    |       |                                   |       | 403    | 185    | 588     | 588              |       |
| All other animals.        | 616                              | 1,997  |                                   |       |                                    |       |                                   |       | 616    | 1,997  | 2,613   | 2,613            |       |
| Buckwheat.                |                                  | 1      |                                   |       |                                    |       |                                   |       |        | 1      | 1       | 1                |       |
| Cement, bricks, etc.      | 238                              | 318    |                                   |       |                                    |       |                                   |       | 238    | 318    | 556     | 508              | 48    |
| Coal, hard.               | 678                              | 278    |                                   |       |                                    |       |                                   | 8,498 | 678    | 8,776  | 9,454   | 101              | 9,353 |
| " soft.                   | 459                              | 229    |                                   |       |                                    |       |                                   | 135   | 459    | 364    | 823     | 688              | 135   |
| Corn.                     | 22                               | 59     |                                   |       |                                    |       |                                   |       | 22     | 59     | 81      | 81               |       |
| Dressed meats.            | 3                                | 9      |                                   |       |                                    |       |                                   |       | 3      | 9      | 12      | 12               |       |
| Flour.                    | 196                              | 170    |                                   |       |                                    |       |                                   |       | 196    | 170    | 366     | 366              |       |
| Fruits and vegetables.    | 83                               | 138    |                                   |       |                                    |       |                                   |       | 83     | 138    | 221     | 221              |       |
| Hay.                      | 432                              | 27     |                                   |       |                                    |       |                                   |       | 432    | 27     | 459     | 459              |       |
| Hides and leather.        | 16                               | 2      |                                   |       |                                    |       |                                   |       | 16     | 2      | 18      | 18               |       |
| Household goods.          | 201                              | 180    |                                   |       |                                    |       |                                   |       | 201    | 180    | 381     | 381              |       |
| Iron, pig and bloom.      | 559                              | 56     |                                   |       |                                    |       |                                   |       | 559    | 56     | 615     | 615              |       |
| Iron and steel, all other | 448                              | 67     |                                   |       |                                    |       |                                   |       | 448    | 67     | 515     | 515              |       |
| Live stock.               | 11                               | 16     |                                   |       |                                    |       |                                   |       | 11     | 16     | 27      | 27               |       |
| Merchandise.              | 5,735                            | 2,113  |                                   |       |                                    |       |                                   |       | 5,735  | 2,113  | 7,848   | 7,848            |       |
| Oats.                     | 18                               | 430    |                                   |       |                                    |       |                                   |       | 18     | 430    | 448     | 448              |       |
| Other mill products.      | 123                              | 199    |                                   |       |                                    |       |                                   |       | 123    | 199    | 322     | 322              |       |
| " pack, house prod.       | 190                              | 120    |                                   |       |                                    |       |                                   |       | 190    | 120    | 310     | 310              |       |
| " woods.                  | 1,133                            | 1,900  |                                   |       |                                    |       |                                   |       | 1,133  | 1,900  | 3,033   | 3,033            |       |
| Ore, all other.           | 404                              |        | 203                               |       |                                    |       |                                   |       | 634    |        | 634     | 634              |       |
| " iron.                   |                                  | 3      |                                   |       |                                    |       |                                   |       |        | 3      | 3       | 3                |       |
| Peas.                     | 21                               |        |                                   |       |                                    |       |                                   |       | 21     |        | 21      | 21               |       |
| Petroleum.                | 283                              | 347    |                                   |       |                                    |       |                                   |       | 283    | 347    | 630     | 630              |       |
| Poultry, game and fish    | 25                               | 2      |                                   |       |                                    |       |                                   |       | 25     | 2      | 27      | 27               |       |
| Potatoes.                 | 7                                | 9      |                                   |       |                                    |       |                                   |       | 7      | 9      | 16      | 16               |       |
| Pulpwood.                 | 75                               | 1,098  |                                   |       |                                    |       |                                   |       | 75     | 1,098  | 1,173   | 1,173            |       |
| Sawed lumber.             | 2,081                            | 8,348  |                                   |       |                                    |       |                                   |       | 2,081  | 8,348  | 10,429  | 10,429           |       |
| Shingles.                 | 39                               | 26     |                                   |       |                                    |       |                                   |       | 39     | 26     | 65      | 65               |       |
| Square timber.            | 339                              | 2      |                                   |       |                                    |       |                                   |       | 339    | 2      | 341     | 341              |       |
| Sugar.                    | 515                              | 158    |                                   |       |                                    |       |                                   |       | 515    | 158    | 673     | 673              |       |
| Salt.                     | 645                              | 164    |                                   |       |                                    |       |                                   |       | 645    | 164    | 809     | 809              |       |
| Sand and stone.           | 64,111                           | 43,170 |                                   |       |                                    |       |                                   |       | 64,111 | 43,170 | 107,281 | 107,281          |       |
| Wheat.                    | 6                                | 86     |                                   |       |                                    |       |                                   |       | 6      | 86     | 92      | 92               |       |
| Wines, liquors and beers  | 749                              | 122    |                                   |       |                                    |       |                                   |       | 749    | 102    | 851     | 851              |       |
| Wool.                     |                                  |        |                                   |       |                                    |       |                                   |       | 3      |        | 3       | 3                |       |
| Total freight...          | 80,867                           | 62,009 | 230                               |       |                                    |       |                                   | 8,633 | 81,097 | 70,642 | 151,739 | 142,203          | 9,536 |



TABLE 7, No. 13.—GENERAL STATEMENT showing the Quantity of each Article transported on the Trent Valley canal during the Season of Navigation in 1914.

| Articles.                | From Canadian to Canadian Ports. |        | From Canadian to U. States Ports. |       | From U. States to U. States Ports. |       | From U. States to Canadian Ports. |       | Tons.  |        | Total | Origin of Cargo. |       |
|--------------------------|----------------------------------|--------|-----------------------------------|-------|------------------------------------|-------|-----------------------------------|-------|--------|--------|-------|------------------|-------|
|                          | Up.                              | Down.  | Up.                               | Down. | Up.                                | Down. | Up.                               | Down. | Up.    | Down.  |       | Canadian.        | U. S. |
| Agricultural implem'ts   | 14                               | 15     |                                   |       |                                    |       |                                   |       | 14     | 15     |       | 29               |       |
| All other animals        | 34                               | 29     |                                   |       |                                    |       |                                   |       | 34     | 29     |       | 63               |       |
| Cement, bricks, etc.     | 209                              | 221    |                                   |       |                                    |       |                                   |       | 209    | 221    |       | 430              |       |
| Coal, hard               | 72                               | 6      |                                   |       |                                    |       |                                   |       | 72     | 6      |       | 78               |       |
| " Soft                   | 267                              | 18     |                                   |       |                                    |       |                                   |       | 267    | 18     |       | 285              |       |
| Dressed meats            | 1                                | 1      |                                   |       |                                    |       |                                   |       | 1      | 1      |       | 2                |       |
| Flour                    | 68                               | 12     |                                   |       |                                    |       |                                   |       | 68     | 12     |       | 80               |       |
| Fruits and vegetables    | 4                                |        |                                   |       |                                    |       |                                   |       | 4      |        |       | 4                |       |
| Hay                      | 73                               | 15     |                                   |       |                                    |       |                                   |       | 73     | 15     |       | 88               |       |
| Household goods          | 121                              | 24     |                                   |       |                                    |       |                                   |       | 121    | 24     |       | 145              |       |
| Iron, pig and bloom      | 9                                |        |                                   |       |                                    |       |                                   |       | 9      |        |       | 9                |       |
| Live stock               | 226                              | 45     |                                   |       |                                    |       |                                   |       | 226    | 45     |       | 271              |       |
| Merchandise              | 1,538                            | 773    |                                   |       |                                    |       |                                   |       | 1,538  | 773    |       | 2,311            |       |
| Oats                     | 24                               |        |                                   |       |                                    |       |                                   |       | 24     |        |       | 24               |       |
| Other mill products      | 112                              | 21     |                                   |       |                                    |       |                                   |       | 112    | 21     |       | 133              |       |
| " woods                  | 10,845                           | 26,404 |                                   |       |                                    |       |                                   | 175   | 10,845 | 26,579 |       | 37,424           |       |
| " Iron                   | 4                                |        |                                   |       |                                    |       |                                   |       | 4      |        |       | 4                |       |
| Peas                     | 6                                |        |                                   |       |                                    |       |                                   |       | 6      |        |       | 6                |       |
| Petroleum                | 77                               | 11     |                                   |       |                                    |       |                                   |       | 77     | 11     |       | 88               |       |
| Potatoes                 | 88                               | 3      |                                   |       |                                    |       |                                   |       | 88     | 3      |       | 91               |       |
| Pulpwood                 | 150                              | 21,816 |                                   |       |                                    |       |                                   |       | 150    | 21,816 |       | 21,966           |       |
| Sawed lumber             | 841                              | 1,919  |                                   |       |                                    |       |                                   |       | 841    | 1,919  |       | 2,760            |       |
| Shingles                 | 46                               | 40     |                                   |       |                                    |       |                                   |       | 46     | 40     |       | 86               |       |
| Square timber            | 147                              | 90     |                                   |       |                                    |       |                                   |       | 147    | 90     |       | 237              |       |
| Sugar                    | 15                               |        |                                   |       |                                    |       |                                   |       | 15     |        |       | 15               |       |
| Salt                     |                                  | 2      |                                   |       |                                    |       |                                   |       |        | 2      |       | 2                |       |
| Sand and stone           | 166                              | 535    |                                   |       |                                    |       |                                   |       | 166    | 535    |       | 701              |       |
| Wheat                    | 360                              | 9      |                                   |       |                                    |       |                                   |       | 360    | 9      |       | 369              |       |
| Wines, liquors and beers | 14                               |        |                                   |       |                                    |       |                                   |       | 14     |        |       | 14               |       |
| Wool                     |                                  |        |                                   |       |                                    |       |                                   |       |        |        |       |                  |       |
| Total freight            | 15,531                           | 52,009 |                                   |       |                                    |       | 175                               |       | 15,531 | 52,184 |       | 67,715           |       |



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TABLE 7, No. 14.—GENERAL STATEMENT showing the Quantity of each Article transported on the St. Andrew's canal during the Season of Navigation in 1914.

| Articles.                 | From Canadian to Canadian Ports. |       | From Canadian to U. States Ports. |       | From U. States to U. States Ports. |       | From U. States to Canadian Ports. |       | Tons.  |       | Total  | Origin of Cargo. |       |
|---------------------------|----------------------------------|-------|-----------------------------------|-------|------------------------------------|-------|-----------------------------------|-------|--------|-------|--------|------------------|-------|
|                           | Up.                              | Down. | Up.                               | Down. | Up.                                | Down. | Up.                               | Down. | Up.    | Down. |        | Canadian.        | U. S. |
| Cement, bricks, etc.      |                                  | 150   |                                   |       |                                    |       |                                   |       |        | 150   | 150    | 150              |       |
| Coal, Hard.               | 240                              |       |                                   |       |                                    |       |                                   |       | 240    |       | 240    | 240              |       |
| “ Soft.                   | 20                               |       |                                   |       |                                    |       |                                   |       | 20     |       | 20     | 20               |       |
| Flour.                    |                                  | 12    |                                   |       |                                    |       |                                   |       |        | 12    | 12     | 12               |       |
| Iron and steel, all other |                                  | 18    |                                   |       |                                    |       |                                   |       |        | 18    | 18     | 18               |       |
| Merchandise.              | 3                                | 116   |                                   |       |                                    |       |                                   |       | 3      | 116   | 119    | 119              |       |
| Oats.                     |                                  | 10    |                                   |       |                                    |       |                                   |       |        | 10    | 10     | 10               |       |
| Other woods.              | 3,745                            |       |                                   |       |                                    |       |                                   |       | 3,745  |       | 3,745  | 3,745            |       |
| Petroleum.                |                                  | 1     |                                   |       |                                    |       |                                   |       |        | 1     | 1      | 1                |       |
| Poultry, game and fish    | 1                                |       |                                   |       |                                    |       |                                   |       | 1      |       | 1      | 1                |       |
| Pulpwood.                 | 2,280                            |       |                                   |       |                                    |       |                                   |       | 2,280  |       | 2,280  | 2,280            |       |
| Sawed lumber.             |                                  | 25    |                                   |       |                                    |       |                                   |       |        | 25    | 25     | 25               |       |
| Sand and stone.           | 35,392                           |       |                                   |       |                                    |       |                                   |       | 35,392 |       | 35,392 | 35,392           |       |
| Total freight.            | 41,681                           | 332   |                                   |       |                                    |       |                                   |       | 41,681 | 332   | 42,013 | 42,013           |       |



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TABLE 8.—Statement showing the Classified Tonnage of all kinds of Vessels  
SAULT STE.

| CANADIAN. |                          |     |          |       |                        |     |          |
|-----------|--------------------------|-----|----------|-------|------------------------|-----|----------|
| Class     | Steam Vessels.           | No. | Tonnage. | Class | Sailing Vessels.       | No. | Tonnage. |
| 1         | 5,000 to 5,704 tons..... | 1   | 5,704    | 1     | 5,000 to .. tons ..... |     |          |
| 2         | 4,000 " 5,000 " .....    | 3   | 13,550   | 2     | 4,000 " 5,000 " .....  |     |          |
| 3         | 3,000 " 4,000 " .....    | 3   | 10,750   | 3     | 3,000 " 4,000 " .....  |     |          |
| 4         | 2,000 " 3,000 " .....    | 13  | 29,950   | 4     | 2,000 " 3,000 " .....  |     |          |
| 5         | 1,000 " 2,000 " .....    | 75  | 97,700   | 5     | 1,000 " 2,000 " .....  |     |          |
| 6         | Under 1,000 " .....      | 56  | 13,460   | 6     | Under 1,000 " .....    | 61  | 12,215   |
|           | Total.....               | 151 | 171,114  |       | Total.....             | 61  | 12,215   |

WELLAND

|   |                         |     |         |   |                        |    |        |
|---|-------------------------|-----|---------|---|------------------------|----|--------|
| 1 | 250 to 1,900 tons ..... | 112 | 118,725 | 1 | 250 to 1,250 tons..... | 29 | 18,800 |
| 2 | 200 " 249 " .....       | 5   | 1,050   | 2 | 200 " 249 .....        | 7  | 1,650  |
| 3 | 150 " 199 " .....       | 3   | 500     | 3 | 150 " 199 .....        | 3  | 450    |
| 4 | 100 " 149 " .....       | 3   | 375     | 4 | 100 " 149 .....        | 7  | 700    |
| 5 | 50 " 99 " .....         | 11  | 820     | 5 | 50 " 99 " .....        | 4  | 230    |
| 6 | Under 50 " .....        | 31  | 880     | 6 | Under 50 " .....       | 2  | 45     |
|   | Total.....              | 165 | 122,350 |   | Total.....             | 52 | 21,875 |

ST. LAWRENCE

|   |                         |     |         |   |                        |     |        |
|---|-------------------------|-----|---------|---|------------------------|-----|--------|
| 1 | 250 to 1,667 tons. .... | 114 | 115,147 | 1 | 250 to 1,226 tons..... | 75  | 34,250 |
| 2 | 200 " 249 " .....       | 4   | 860     | 2 | 200 " 249 " .....      | 7   | 1,450  |
| 3 | 150 " 199 " .....       | 4   | 660     | 3 | 150 " 199 " .....      | 43  | 5,620  |
| 4 | 100 " 149 " .....       | 11  | 1,350   | 4 | 100 " 149 " .....      | 48  | 5,700  |
| 5 | 50 " 99 " .....         | 29  | 1,985   | 5 | 50 " 99 " .....        | 28  | 2,195  |
| 6 | Under 50 " .....        | 43  | 960     | 6 | Under 50 " .....       | 5   | 115    |
|   | Total.....              | 205 | 120,962 |   | Total.....             | 206 | 24,330 |

RIDEAU, OTTAWA AND

|   |                      |    |       |   |                      |     |        |
|---|----------------------|----|-------|---|----------------------|-----|--------|
| 1 | 250 to 370 tons..... | 4  | 1,260 | 1 | 250 to 380 tons..... | 5   | 1,520  |
| 2 | 200 " 249 " .....    |    |       | 3 | 510 " 249 " .....    | 3   | 510    |
| 3 | 150 " 199 " .....    | 5  | 860   | 3 | 150 " 199 " .....    | 32  | 5,310  |
| 4 | 100 " 149 " .....    | 5  | 580   | 4 | 100 " 149 " .....    | 32  | 3,840  |
| 5 | 50 " 99 " .....      | 12 | 680   | 5 | 50 " 99 " .....      | 22  | 1,500  |
| 6 | Under 50 " .....     | 31 | 535   | 6 | Under 50 " .....     | 21  | 370    |
|   | Total.....           | 57 | 3,915 |   | Total.....           | 115 | 13,050 |



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passed through the following canals during the Season of Navigation in 1914.

MARIE CANAL.

| UNITED STATES. |                         |     |          |        |                          |     |          |
|----------------|-------------------------|-----|----------|--------|--------------------------|-----|----------|
| Class          | Steam Vessels.          | No. | Tonnage. | Class  | Sailing Vessels.         | No. | Tonnage. |
| 1              | 5,000 " 6,498 tons..... | 71  | 385,848  | 1      | 5,000 to ..... tons..... |     |          |
| 2              | 4,000 " 5,000 " .....   | 79  | 354,650  | 2      | 4,000 " 5,000 " .....    |     |          |
| 3              | 3,000 " 4,000 " .....   | 103 | 356,200  | 3      | 3,000 " 4,000 " .....    | 1   | 3,150    |
| 4              | 2,000 " 3,000 " .....   | 32  | 86,400   | 4      | 2,000 " 3,000 " .....    | 1   | 2,100    |
| 5              | 1,000 " 2,000 " .....   | 16  | 27,550   | 5      | 1,000 " 2,000 " .....    |     |          |
| 6              | Under 1,000 " .....     | 28  | 9,550    | 6      | Under 1,000 " .....      | 6   | 1,925    |
|                | Total.....              | 329 | 1,220,19 | 8..... | Total.....               | 8   | 7,175    |

CANAL.

|   |                       |     |        |    |                     |    |       |
|---|-----------------------|-----|--------|----|---------------------|----|-------|
| 1 | 250 to 2,000 tons.... | 61  | 67,950 | 1  | 250 " 900 tons..... | 14 | 6,625 |
| 2 | 200 " 249 " .....     | 3   | 600    | 2  | 200 " 249 " .....   | 4  | 800   |
| 3 | 150 " 199 " .....     | 3   | 475    | 3  | 150 " 199 " .....   | 3  | 475   |
| 4 | 100 " 149 " .....     | 5   | 550    | 4  | 100 " 149 " .....   | 6  | 600   |
| 5 | 50 " 99 " .....       | 11  | 720    | 5  | 50 " 99 " .....     | 2  | 160   |
| 6 | Under 50 " .....      | 39  | 535    | 39 |                     | 6  | 130   |
|   | Total.....            | 122 | 70,830 |    | Total.....          | 35 | 8,790 |

CANAL.

|   |                        |    |        |   |                      |     |        |
|---|------------------------|----|--------|---|----------------------|-----|--------|
| 1 | 250 to 1,565 tons..... | 25 | 24,973 | 1 | 250 to 700 tons..... | 11  | 3,860  |
| 2 | 200 " 249 " .....      | 3  | 640    | 2 | 200 " 249 " .....    | 3   | 640    |
| 3 | 150 " 199 " .....      | 6  | 980    | 3 | 150 " 199 " .....    |     |        |
| 4 | 100 " 149 " .....      |    |        | 4 | 100 " 149 " .....    | 78  | 8,050  |
| 5 | 50 " 99 " .....        | 6  | 405    | 5 | 50 " 99 " .....      | 23  | 2,010  |
| 6 | Under 50 " .....       | 5  | 105    | 6 | Under " .....        |     |        |
|   | Totals.....            | 45 | 27,103 |   | Total.....           | 115 | 14,560 |

CHAMBLY CANALS.

|   |                      |   |     |   |                      |     |        |
|---|----------------------|---|-----|---|----------------------|-----|--------|
| 1 | 250 to ... tons..... |   |     | 1 | 250 to ... tons..... |     |        |
| 2 | 200 " 249 " .....    |   |     | 2 | 200 " 249 " .....    |     |        |
| 3 | 150 " 199 " .....    |   |     | 3 | 150 " 119 " .....    | 6   | 960    |
| 4 | 100 " 149 " .....    |   |     | 4 | 100 " 149 " .....    | 82  | 14,810 |
| 5 | 50 " 99 " .....      | 2 | 130 | 5 | 50 " 99 " .....      | 38  | 30,365 |
| 6 | Under 50 " .....     | 1 | 30  | 6 | Under 50 " .....     | 1   | 35     |
|   | Total.....           | 3 | 160 |   | Total .....          | 127 | 46,170 |

AAW  
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AAW







APPENDIX

DOMINION CANALS

The canal systems of the Dominion, under government control in connection with lakes and navigable rivers, are as follows:—

*First—The through route between Montreal and the head of Lake Superior (14 feet minimum depth of water.)*

|   | Miles. |
|---|--------|
| 1. Lachine canal.....   | 8½     |
| Lake St. Louis and river St. Lawrence.....                    | 16     |
| 2. Soulanges canal.....                                       | 14     |
| Lake St. Francis and river St. Lawrence.....                  | 31     |
| 3. Cornwall canal.....  | 11¼    |
| River St. Lawrence.....                                       | 5      |
| 4. Farran's Point canal.....                                  | 1½     |
| River St. Lawrence.....                                       | 9½     |
| 5. Rapide Plat canal.....                                     | 3⅜     |
| River St. Lawrence.....                                       | 4      |
| 6. Galops canal.....  | 7⅓     |
| River St. Lawrence and lake Ontario.....                      | 228    |
| 7. Welland canal.....   | 26¾    |
| Lake Erie, Detroit river, lake St. Clair, lake Huron, &c..... | 574    |
| 8. Sault Ste. Marie canal.....                                | 1¼     |
| Lake Superior to Port Arthur.....                             | 272    |
| Total.....  | 1,214  |
| To Duluth.....  | 1,336  |
| Chicago.....  | 1,240  |

*Second.—Ottawa to lake Champlain.*

1. Grenville.   2. Carillon.   3. St. Anne's.   4. Chambly.   5. St. Ours canals.

*Third.—Ottawa to Kingston and Perth.*

1. Rideau canal.

*Fourth.—Lake Ontario at Trenton to lake Huron at mouth of river Severn.*

1. Trent canal (not completed).

*Fifth.—Ocean to Bras d'Or lakes.*

1. St. Peter's canal.



## RIVER ST. LAWRENCE AND LAKES.

The river St. Lawrence with the system of canals established on its course above Montreal, and the lakes Ontario, Erie, St. Clair, Huron and Superior, with connecting canals, afford a course of water communication extending from the Straits of Belle Isle to Port Arthur, at the head of lake Superior, a distance of 2,217 statute miles. The distance to Duluth is 2,339 statute miles. The distance to Chicago, 2,243 miles.

From the straits of Belle Isle, at the mouth of the St. Lawrence, to Montreal, the distance is 1,003 miles. From Quebec to Montreal, the distance is 160 miles. Owing to the shallowness of the waters on a portion of the river between these two places, particularly through lake St. Peter, vessels drawing more than from ten to twelve feet were formerly barred from passage for the greater part of the season of navigation. In 1826, the question of deepening the channel was first definitely mooted, but it was not until 1844 that any dredging operations were begun. In that year, the deepening of a new straight channel was commenced, but the scheme was abandoned in 1847. In 1851 the deepening of the present channel was begun. At that time the depth of the channel at low water was 10 feet 6 inches. By the year 1869, this depth had been increased to 20 feet, by 1882 to 25 feet, and by the close of 1888 the depth of 27½ feet, at low water, was attained for a distance of 108 miles from Montreal to a point within tidal influence. This work is now being continued by the government of Canada, which in 1888, under the provisions of the Act 51 Vic., ch. 5, of that year, assumed the indebtedness. The channel has a minimum width of 300 feet, extending to 550 feet at points of curvature. The channel is lighted and buoyed.

Navigation, which is closed by ice during the winter months, opens about the end of April.

Montreal has by this work been placed at the head of ocean navigation, and here the canal systems of the river St. Lawrence begin, overcoming the various rapids by which the river channel upwards is obstructed, and giving access through the St. Lawrence canals, the Welland canal, the great lakes and the Sault Ste. Marie canal, to the head of lake Superior.

The difference in level between the point on the St. Lawrence, near Three Rivers, where tidal influence ceases, and lake Superior is about 600 feet.

The Dominion canals, constructed between Montreal and lake Superior are the Lachine, Soulanges, Cornwall, Farran's Point, Rapide Plat, Galops, Murray, Welland and Sault Ste. Marie. Their aggregate length is 74 miles; total lockage (or height directly overcome by locks), 553½ feet. The number of locks through which a vessel would pass in its passage from Montreal, at the head of ocean navigation, to the head of lake Superior is 48. The Soulanges canal takes the place of the Beauharnois canal; the latter may be abandoned for navigation purposes.

Communication between lakes Huron and Superior is obtained by means of the Canadian Sault Ste. Marie canal, and also by the St. Mary's Falls canal, situated on the United States side of the river St. Mary. Both these canals are free of toll.

It is important to note that the enlargement of the canals on the main route between Montreal and lake Erie comprises locks of the following minimum dimensions: Length, 270 feet; width, 45 feet; depth of water on sills, 14 feet. The length of the vessels to be accommodated is limited to 255 feet. At Farran's in the canal of that name, the lock is 800 feet long. A similar lock is built at Iroquois on the Galops canal, the object being to pass a full tow at one lockage.



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## LACHINE CANAL.

|   |      |                  |
|---|------|------------------|
| First construction commenced.....         | 1821 |                  |
| “ completed.....                          | 1825 |                  |
| First enlargement commenced.....          | 1843 |                  |
| “ completed.....                          | 1848 |                  |
| Second enlargement commenced.....         | 1873 |                  |
| “ completed.....                          | 1901 |                  |
| Length of canal.....                      | 8½   | statute miles.   |
| Number of locks.....                      | 5    |                  |
| Dimensions of locks.....                  | 270  | feet by 45 feet. |
| Total rise of lockage.....                | 45   | “                |
| Depth of water on sills at two locks..... | 18   | “                |
| “ at three locks.....                     | 14   | “                |
| Average width of new canal.....           | 150  | “                |

The old lift locks, 200 feet by 45 feet, are still available, with 9 feet of water on mitre sills.

The canal consists of one channel, with two distinct systems of locks, the old and the enlarged. There are two lock entrances at each end.

The canal extends from the city of Montreal to the town of Lachine, overcoming the St. Louis rapids, the first of the series of rapids which bars the ascent to the river St. Lawrence. They are 1,006 miles distant from the Straits of Belle Isle.

## SOULANGES CANAL.

|                                 |      |                     |
|---------------------------------|------|---------------------|
| Construction commenced.....     | 1892 |                     |
| Open for traffic.....           | 1899 |                     |
| Length of canal.....            | 14   | statute miles.      |
| Number of locks, lift.....      | 4    |                     |
| “ guard.....                    | 1    |                     |
| Dimensions of locks.....        | 280  | feet by 45 feet.    |
| Total rise of lockage.....      | 84   | “                   |
| Depth of water on sills.....    | 15   | “                   |
| Breadth of canal at bottom..... | 100  | “                   |
| “ “ water surface.....          | 164  | “                   |
| Number of arc lights.....       | 219  | of 2,000 c.p. each. |

The canal extends from Cascade point to Coteau landing, overcoming the Cascade rapids, Cedar rapid and Coteau rapids.

From the head of the Lachine to the foot of the Soulanges, the distance is sixteen miles.

## CORNWALL CANAL.

|                                 |      |                  |
|---------------------------------|------|------------------|
| First commenced, 9 feet.....    | 1844 |                  |
| “ opened.....                   | 1847 |                  |
| Enlargement commenced.....      | 1897 |                  |
| “ completed.....                | 1900 |                  |
| Length of canal.....            | 11   | statute miles.   |
| Number of locks.....            | 6    |                  |
| Dimensions of locks.....        | 270  | feet by 75 feet. |
| Total rise of lockage.....      | 48   | “                |
| Depth of water on sills.....    | 14   | “                |
| Breadth of canal at bottom..... | 90   | “                |
| “ “ water surface.....          | 154  | “                |



The old lift locks, 200 ft by 55 feet, are also available, with nine feet of water on mitre sills.

From the head of the Soulanges to the foot of the Cornwall canal there is a stretch through lake St. Francis of 31 miles, which is being made navigable for vessels drawing fourteen feet.

The Cornwall canal extends past the Long Sault rapids from the town of Cornwall to Dickinson's landing.

WILLIAMSBURG CANALS.

The Farran's Point, Rapide Plat, and Galops canals are collectively known as the Williamsburg canals.

FARRAN'S POINT CANAL.

|  |                      |
|--|----------------------|
| First commenced, 9 feet.....             | 1844                 |
| Opened.....                              | 1847                 |
| Enlargement commenced.....               | 1897                 |
| “ completed.....                         | 1900                 |
| Length of canal.....                     | 1½ miles.            |
| Number of locks.....                     | 1                    |
| New lock.....                            | 800 feet by 45 feet. |
| Old lock.....                            | 200 “ “              |
| Total rise of lockage.....               | 3½ feet.             |
| Depth of water on sills of new lock..... | 14 “                 |
| Depth of water on sills of old lock..... | 9 “                  |
| Breadth of canal at bottom.....          | 90 “                 |
| Breadth of canal at water surface.....   | 154 “                |

From the head of the Cornwall canal to the foot of Farran's Point canal, the distance on the river St. Lawrence is five miles. The latter canal enables vessels ascending the river to avoid Farran's Point rapid, passing the full tow at one lockage. Descending vessels run the rapids with ease and safety.

RAPIDE PLAT CANAL.

|   |                      |
|---|----------------------|
| First commenced, 9 feet.....              | 1844                 |
| “ opened.....                             | 1847                 |
| Enlargement commenced.....                | 1884                 |
| “ completed.....                          | 1897                 |
| Length of canal.....                      | 3⅔ miles.            |
| Number of locks.....                      | 2                    |
| Dimensions of locks.....                  | 270 feet by 45 feet. |
| Total rise in lockage.....                | 11½ feet.            |
| Depth of water on sills.....              | 14 “                 |
| Breadth of canal at bottom.....           | 80 “                 |
| Breadth of canal at surface of water..... | 152 “                |

The old lift lock, 200 by 45 feet, is also available, with nine feet of water on mitre sills.

From the head of Farran's Point canal to the foot of Rapide Plat canal there is a navigable stretch of 9½ miles. This canal was formed to enable vessels ascending the river to pass the rapids at that place. Descending vessels run the rapids safely.



GALOPS CANAL.

|  |  |
|--|--|
| First commenced, 9 feet.....                           | 1844                                     |
| Opened.....  | 1846                                     |
| Enlargement commenced.....                             | 1888                                     |
| “ completed.....                                       | 1903                                     |
| Length of canal.....                                   | 7 $\frac{3}{4}$ miles.                   |
| Number of locks.....                                   | 3  |
| Dimension of locks (one of which is a guard lock)..... | { 800 by 50.<br>270 by 45.<br>303 by 45. |
| Total rise of lockage.....                             | 15 $\frac{1}{2}$ feet.                   |
| Depth of water on sills.....                           | 14 “                                     |
| Breadth of canal at bottom.....                        | 80 “                                     |
| Breadth of canal at surface of water.....              | 144 “                                    |

From the head of Rapide Plat canal to Iroquois, at the foot of the Galops canal, the St. Lawrence is navigable 4 $\frac{1}{2}$  miles. The canal enables vessels to overcome the rapids at Pointe aux Iroquois, Point Cardinal and the Galops.

MURRAY CANAL.

|  |              |
|--|--------------|
| Construction begun.....                            | 1882         |
| Completed.....                                     | 1890         |
| Length between eastern and western pier heads..... | 5 1-6 miles. |
| Breadth at bottom.....                             | 80 feet.     |
| Breadth at water surface.....                      | 124 “        |
| Depth below lowest known lake level.....           | 11 “         |
| No locks.  |              |

This canal extends through the Isthmus of Murray, giving connection westward between the head waters of the Bay of Quinte and lake Ontario, and thus enabling vessels to avoid the open lake navigation.

WELLAND CANAL.

Main line from Port Dalhousie, lake Ontario, to Port Colborne, lake Erie.

|   | Old Line.               | Enlarged<br>or New Line. |
|---|-------------------------|--------------------------|
| Length of canal.....                    | 27 $\frac{1}{2}$ miles. | 26 $\frac{3}{4}$ miles.  |
| Pairs of guard-gates (formerly 3):..... | 2                       | 1                        |
| Number of locks { lift.....             | 26                      | 25                       |
| { guard.....                            | 1                       | 1                        |
| 1 lock 270 x 45                         |                         |                          |
| 1 lock 200 x 45                         |                         |                          |
| Dimensions..... { 1 (tidal) 230 x 45    | 270 feet x 45 feet.     |                          |
| 24 locks 150 x 26 ft. 6 in.             |                         |                          |
| Total rise of lockage.....              | 326 $\frac{3}{4}$ feet  | 326 $\frac{3}{4}$ feet.  |
| Depth of water on sills.....            | 10 $\frac{1}{4}$ “      | 14 “                     |
| Construction commenced, 8 feet.....     |                         | 1824                     |
| “ completed .....                       |                         | 1833                     |
| Enlargement commenced, 14 feet.....     |                         | 1872                     |
| “ completed.....                        |                         | 1887                     |



5 GEORGE V., A. 1915

WELLAND RIVER BRANCHES.

|  |                  |
|--|------------------|
| Length of canal—   |                  |
| Port Robinson cut to river Welland.....                              | 2,622 feet.      |
| From the canal at Welland to the river,<br>via lock at Aqueduct..... | 300 “            |
| Chippewa cut to river Niagara.....                                   | 1,020 “          |
| Number of locks—one at Aqueduct and one at<br>Port Robinson.....     | 2                |
| Dimensions of locks.....   | 150 by 26½ feet. |
| Total lockage from the canal at Welland down<br>river Welland.....   | 10 feet.         |
| Depth of water on sills.....   | 9 “ 10 inches.   |

GRAND RIVER FEEDER.

|                              |   |
|------------------------------|---|
| Length of canal.....         | 21 miles.   |
| Number of locks.....         | 2   |
| Dimensions of locks.....     | 1 of 150 by } 26½ feet.<br>1 of 300 by } 45 “<br>28 “ |
| Total rise of lockage.....   | 10 feet.  |
| Depth of water on sills..... | 9 “   |

PORT MAITLAND BRANCH.

|                              |                      |
|------------------------------|----------------------|
| Length of canal.....         | 1¾ miles.            |
| Number of locks.....         | 1                    |
| Dimensions of locks.....     | 185 feet by 45 feet. |
| Total rise of lockage.....   | 7 “                  |
| Depth of water on sills..... | 7½ “                 |

The Welland canal has two entrances from lake Ontario, at Port Dalhousie, one for the old, the other for the new canal.

From Port Dalhousie to Allanburg, 11¾ miles, there are two distinct lines of canal in operation, the old line and the enlarged or new line.

From Allanburg to Port Colborne, a distance of 15 miles, there is only one channel, the old canal having been enlarged.

From the head of the Welland canal there is a deep water navigation through lake Erie, the Detroit river, Lake St. Clair, the St. Clair river, Lake Huron and river St. Mary to the Sault canal, a distance of about 580 miles. From the Sault the distance through lake Superior to Port Arthur is 274 miles, and to Duluth 397 miles.

SAULT STE. MARIE CANAL.

|   |                   |
|---|-------------------|
| Construction commenced.....   | 1888              |
| Opened for traffic.....   | 1895              |
| Length of canal, between the extreme ends of<br>the entrance piers..... | 7,472 feet.       |
| Number of locks.....  | 1                 |
| Dimensions of locks.....  | 900 “ by 60 feet. |
| Depth of water on sills (at lowest known<br>water level).....           | 18 “ 3 inches.    |
| Total rise or lockage.....  | 18 “              |
| Breadth of canal at bottom.....   | 141 “ 8 inches.   |
| Breadth at surface of water.....  | 150 “             |



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This canal has been constructed through St. Mary's island, on the north side of the rapids of the river St. Mary, and, with that river, gives communication on Canadian territory between lakes Huron and Superior. The masonry pier of the bridge carrying the Canadian Pacific Railway over the canal, which stood in the channel of the canal, forming an obstruction to navigation, has been removed; the swing now spanning the full width of the channel or prism of the canal.

MONTREAL, OTTAWA AND KINGSTON:

This route extends from the harbour of Montreal to the port of Kingston' passing through the Lachine canal, the navigation section of the lower river Ottawa, and the Ottawa canals, to the city of Ottawa; thence by the river Rideau and the Rideau canal to Kingston, on lake Ontario—a total distance of 245<sup>5</sup>/<sub>8</sub> miles.

After leaving the Lachine canal the works constructed to overcome difficulties of navigation are:—

Ottawa River Canals.

- The Ste. Anne's lock

Carillon canal.
- Grenville canal.

Rideau canal.

The total lockage (not including that of the Lachine canal) is 509 feet (345 rise, 164 fall)—and the number of locks is 55.

The following table exhibits the intermediate distances from Montreal harbour:—

| Sections of Navigation.  | Interme-<br>diate<br>Distance.  | Total<br>Distance<br>from<br>Montreal. |
|--|---------------------------------|--|
|  | Miles.                          | Miles.                                 |
| The Lachine canal.....   | 8 <sup>1</sup> / <sub>2</sub>   |  |
| From Lachine to Ste. Anne's lock.....                          | 15 <sup>1</sup> / <sub>2</sub>  | 23 <sup>1</sup> / <sub>2</sub>         |
| Ste. Anne's lock and piers.....                                | <sup>1</sup> / <sub>8</sub>     | 23 <sup>5</sup> / <sub>8</sub>         |
| Ste. Anne's lock to Carillon canal.....                        | 27 <sup>1</sup> / <sub>2</sub>  | 50 <sup>5</sup> / <sub>8</sub>         |
| The Carillon canal.....  | <sup>1</sup> / <sub>8</sub>     | 51 <sup>3</sup> / <sub>8</sub>         |
| The Carillon to Grenville canal.....                           | 6 <sup>1</sup> / <sub>2</sub>   | 57 <sup>5</sup> / <sub>8</sub>         |
| The Grenville canal.....                                       | 5 <sup>1</sup> / <sub>2</sub>   | 63 <sup>3</sup> / <sub>8</sub>         |
| From the Grenville canal to entrance of Rideau navigation..... | 56                              | 119 <sup>3</sup> / <sub>8</sub>        |
| Rideau navigation ending at Kingston.....                      | 126 <sup>1</sup> / <sub>2</sub> | 245 <sup>5</sup> / <sub>8</sub>        |

STE. ANNE'S LOCK.

|                             |      |
|-----------------------------|------|
| Construction commenced..... | 1814 |
| “ completed.....            | 1816 |
| Rebuilt of wood.....        | 1833 |
| “ in masonry.....           | 1843 |

|                            | Old Lock.                        | New Lock.                         |
|----------------------------|----------------------------------|-----------------------------------|
| Length of canal.....       | <sup>1</sup> / <sub>8</sub> mile | <sup>1</sup> / <sub>8</sub> mile. |
| Number of locks.....       | 1                                | 1                                 |
| Dimensions of locks...: .  | 190 x 45 feet.                   | 200 x 45 feet.                    |
| Total rise of lockage..... | 3 feet.                          | 3 feet.                           |
| Depth of water on sills... | 6 “                              | 9 “                               |

This work, with guide piers above and below, surmounts the Ste. Anne's rapids between Ile Perrot and the head of the Island of Montreal, at the outlet of that portion of the river Ottawa which forms the lake of Two Mountains, 23<sup>1</sup>/<sub>2</sub> miles from Montreal harbour.



THE CARILLON CANAL.

|  |                     |
|--|---------------------|
| Construction commenced.....            | 1819                |
| “ completed.....                       | 1833                |
| Enlargement commenced.....             | 1871                |
| “ completed.....                       | 1887                |
| Length of canal.....                   | $\frac{3}{4}$ mile. |
| Number of locks.....                   | 2                   |
| Dimensions of locks.....               | 200 x 45 feet.      |
| Total rise or lockage.....             | 16 feet.            |
| Depth of water on sills.....           | 9 “                 |
| Breadth of canal at bottom.....        | 100 “               |
| Breadth of canal at water surface..... | 110 “               |

This canal overcomes the Carillon rapids.

From Ste. Anne’s lock to the foot of the Carillon canal there is a navigable stretch of 27 miles, through the lake of Two Mountains and the river Ottawa.

By the construction of the Carillon dam across the river Ottawa the water at that point is raised 9 feet, enabling the river above to be used for navigation.

GRENVILLE CANAL.

|   |                       |
|---|-----------------------|
| Construction commenced.....               | 1819                  |
| “ completed.....                          | 1833                  |
| Enlargement commenced.....                | 1871                  |
| “ completed.....                          | 1887                  |
| Length of canal.....                      | $5\frac{3}{4}$ miles. |
| Number of locks.....                      | 5                     |
| Dimensions of locks.....                  | 200 x 45 feet         |
| Total rise or lockage.....                | $43\frac{3}{4}$ feet. |
| Depth of water on sills.....              | 9 “                   |
| Breadth of canal at bottom.....           | 40 to 50 ft.          |
| Breadth of canal at surface of water..... | 50 to 80 “            |

This canal, by which the Long Sault rapids are avoided, is about 56 miles below the city of Ottawa, up to which point the river Ottawa affords unimpeded navigation.

RIDEAU NAVIGATION.

|                             |      |
|-----------------------------|------|
| Construction commenced..... | 1826 |
| “ completed.....            | 1832 |

The Rideau system connects the river Ottawa, at the city of Ottawa, with the eastern end of lake Ontario, at Kingston

|  |  |
|--|--|
| Length of navigation waters.....                   | 126 $\frac{1}{4}$ miles.   |
| Number of locks going from Ottawa to Kingston..... | 35 ascending.<br>14 descending.  |
| Total lockage.....                                 | 457 $\frac{1}{2}$ feet. 292 $\frac{1}{2}$ rise and<br>165 $\frac{1}{4}$ fall at low water. |
| Dimensions of locks.....                           | 134 x 33 feet.   |
| Depth of water on sills.....                       | 5 feet.  |
| Navigation depth through the several reaches.....  | 5 “  |
| Breadth of canal reaches at bottom.....            | 60 ft. in earth.<br>54 feet in rock.   |
| Breadth of canal at surface of water.....          | 80 feet in earth.  |



## SESSIONAL PAPER No. 20a

## PERTH BRANCH.

|   |                     |
|---|---------------------|
| Construction commenced.....               | 1883                |
| “ completed.....                          | 1892                |
| Length of canal.....                      | 7 miles.            |
| Number of locks.....                      | 2                   |
| Dimensions of locks.....                  | 134 feet x 33 feet. |
| Total rise or lockage.....                | 26 “                |
| Depth of water on sills.....              | 5 “ 6 inches.       |
| Length of dam.....                        | 200 “               |
| Breadth of canal at bottom.....           | 40 “ in rock.       |
|   | 60 “ in clay.       |
| Breadth of canal at surface of water..... | 80 “                |

The Perth branch of the Rideau canal affords communication between Beveridge's bay, on lake Rideau and the town of Perth.

The summit level of the Rideau system is at upper lake Rideau, but several of the descending reaches are also supplied by waters which have been made tributary to them. The following description gives the source of supply:—

From the summit, the route towards Ottawa follows the Rideau river, and that towards Kingston follows the river Cataraqui. The supply of water for the canal is derived from the reserves given in detail below.

These may be divided into three systems, viz.:—

1. The summit level, supplied by the Wolfe lake system.
2. The eastern descending level to Ottawa, supplied by the river Tay system, discharging into lake Rideau.
3. The southwest descending level to Kingston, supplied by the Mud lake system formerly known as the Devil lake system, discharging into lake Openicon.

Lake Openicon receives the waters of Buck lake and Rock lake.

All these waters on the descending level, supplemented by those of lake Loughboro', flow into Cranberry lake, which, discharging through Round Tail outlet, forms the river Cataraqui. The river, rendered navigable by dams at various points, affords a line of navigation to Kingston.

## RICHELIEU AND LAKE CHAMPLAIN.

This system, commencing at Sorel, at the confluence of the rivers St. Lawrence and Richelieu, 46 miles below Montreal, extends along the river Richelieu, through the St. Ours lock to the basin of Chambly; thence by the Chambly canal, to St. Johns, and up the river Richelieu to lake Champlain. The distance from Sorel to the boundary line is 81 miles.

At Whitehall, the southern end of lake Champlain is entered, and connection is obtained with the river Hudson, by which the city of New York is directly reached. From the boundary line to New York the distance is 330 miles.

The following table shows the distances between Sorel and New York:—

| Section of Navigation.                         | Interme-<br>diate<br>Distance. | Total<br>Distances. |
|--|--------------------------------|---------------------|
|  | Miles.                         | Miles.              |
| Sorel to St. Ours lock.....                    | 14                             | 14                  |
| St. Ours lock to Chambly canal.....            | 32                             | 46                  |
| Chambly canal.....                             | 12                             | 58                  |
| Chambly canal to boundary line.....            | 23                             | 81                  |
| Boundary line to Champlain canal.....          | 111                            | 192                 |
| Champlain canal to junction with Erie canal... | 66                             | 258                 |
| Erie canal, from junction to Albany.....       | 7                              | 265                 |
| Albany to New York.....                        | 146                            | 411                 |



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## ST. OURS LOCK DAM.

|                                       |                      |
|---------------------------------------|----------------------|
| Construction commenced.....           | 1844                 |
| “ completed.....                      | 1849                 |
| Length.....                           | $\frac{1}{8}$ mile.  |
| Number of locks.....                  | 1                    |
| Dimensions of lock.....               | 200 feet by 45 feet. |
| Total rise of lockage.....            | 5 “                  |
| Depth of waater on sills.....         | 7 feet at low water. |
| Length of dam in eastern channel..... | 300 “                |
| Length of dam in western channel..... | 690 “                |

At St. Ours, 14 miles from Sorel, the river Richelieu is divided by a small island into two channels. The St. Ours lock is in the eastern channel.

There is a navigable depth in the Richelieu of 7 feet between St. Ours lock and Chambly basin, a distance of 32 miles.

## CHAMBLY CANAL.

|   |                  |
|---|------------------|
| Construction commenced.....               | 1831             |
| “ completed.....                          | 1843             |
| Length of canal.....                      | 12 miles.        |
| Number of locks.....                      | 9                |
| Dimensions of locks:—                     |                  |
| Guard lock, No.1, at St. Johns.....       | 122 feet.        |
| Lift “ 2 .....                            | 124 “            |
| “ “ 3, 4, 5, 6 .....                      | 118 “            |
| “ “ 7, 8, 9 combined.....                 | 125 “            |
| Total rise or lockage.....                | 74 “             |
| Depth of water on sills.....              | $6\frac{1}{2}$ “ |
| Breadth of canal at bottom.....           | 36 “             |
| Breadth of canal at surface of water..... | 60 “             |

This canal succeeds the 32 miles of navigable water between St. Ours lock and Chambly basin. The canal overcomes the rapids between Chambly and St. Johns.

## TRENT CANAL.

The term ‘Trent canal’ is applied to a series of water stretches, which do not, however, form a connected system of navigation, and which, in their present condition, are efficient only for local use. By various works this local use has been extended, and by others, now in progress and contemplation, this will become a through route between lake Ontario and lake Huron.

The series is composed of a chain of lakes and rivers, extending from Trenton, at the mouth of the river Trent, on the bay of Quinté, lake Ontario, to lake Huron.

Many years ago the utilizing of these waters for the purpose of through water communication between lake Huron and lake Ontario was projected.

The course, as originally contemplated and modified, is as follows:—

Through the river Trent, Rice lake, the river Otonabee and lakes Clear, Stony, Lovesick, Deer, Buckhorn, Chemong, Pigeon, Sturgeon and Cameron to lake Balsam, the summit water, about 155 miles from Trenton; from lake Balsam by a canal and the river Talbot to lake Simcoe; thence by the river Severn to Georgian bay, lake Huron; the total distance being about 200 miles of which only about 15 or 20 miles will be actual canal.

The full execution of the scheme, commenced by the Imperial Government in 1837, was deferred. By certain works, however, below specified, sections of these waters have been made practicable for navigation, and the whole scheme



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is now being carried out. A branch of the main route, extending from Sturgeon lake south, affords communication with the town of Lindsay, and, through lake Scugog to Port Perry, a distance of 174 miles from Trenton.

The following table gives the distance of navigable and unnavigable reaches:

From Trenton, bay of Quinté to Nine Mile rapids:—

|   |      |     |
|---|------|-----|
| Nine Mile rapids to Percy landing.....      | 19½  | 9   |
| Percy landing to Heeley's Falls dam.....    | —    | 14½ |
| Heeley's Falls dam to Peterborough.....     | 51¾  |     |
| Peterborough to Lakefield.....              | —    | 9½  |
| Lakefield to a point across Balsam lake.... | 61   |     |
|   | 132¼ | 33  |

Total distance, bay of Quinté to a point across Balsam lake 165¼

From Sturgeon point on Sturgeon lake, 48¾ miles from Lakefield, the branch through the town of Lindsay to Port Perry at the head of lake Scugog..... 27

The works by which the Trent navigation has been improved comprise canals, with locks and bridges, at Young's point, Burleigh rapids, Lovesick, Buckhorn rapids, Bobcaygeon, Fenelon falls and Rosedale; also dams at Lakefield, Young's point, Burleigh falls, Lovesick, Buckhorn, Bobcaygeon and Fenelon falls. By these works there is afforded communication between Lakefield, 9½ miles from Peterborough, and Balsam lake, the headwaters of the system; opening up a total of about 160 miles of direct and lateral navigation.

At Lakefield, 9½ miles from Peterborough, the dam at the head of the Nine mile rapids of the river Otonabee maintains navigation on Lake Katchewanoe up to Young's point.

At Young's point, 5 miles from Lakefield, the dam between Lake Katchewanoe and Clear lake controls the water level through Clear and Stony lakes up to the foot of the Burleigh canal.

At Burleigh rapids, 10 miles from Young's point, a canal, about 2¼ miles in length, passes the Burleigh and Lovesick rapids, and gives communication between Stony lake and Deer bay.

At Buckhorn rapids, 7 miles from Burleigh rapids, there is a canal about one-fourth of a mile long.

At Bobcaygeon, 15¾ miles from Buckhorn rapids, a dam, 553 feet long, controls the water level to Fenelon falls.

At Fenelon falls, 15 miles from Bobcaygeon, a canal about one-third of a mile in length connects Sturgeon lake with Cameron lake.

The following is a list of the locks, with their dimensions:—

|   |   |  |     |
|---|---|--|-----|
| 1 | Lock at Rosedale (maintained by the Ontario government), 100' x 30' x 4' 6" to 6' 6" depth water on mitre sill. |  |     |
| 2 | Locks at Fenelon....  | 134'x33'x5' 0" to 7' 6" deep water on mitre sill |     |
| 1 | “ Lindsay....   | 134'x33'x5' 0" to 7' 6"                          | “ “ |
| 1 | “ Bobcaygeon  | 134'x33'x5' 8" to 7' 0"                          | “ “ |
| 1 | “ Buckhorn...   | 134'x33'x5' 0" to 9' 0"                          | “ “ |
| 1 | “ Lovesick....  | 134'x33'x5' 0" to 9' 4"                          | “ “ |
| 2 | “ Burleigh....  | 134'x33'x6' 0" to 8' 0"                          | “ “ |
| 1 | “ Young's pt.   | 134'x33'x5' 0" to 14' 0"                         | “ “ |
| 1 | “ Peterborough  | 134'x33'x5' 0" to 10' 0"                         | “ “ |
| 1 | “ Hastings....  | 134'x33'x7' 0" to 10' 6"                         | “ “ |
| 1 | “ Chisholms...  | 134'x33'x5' 0" to 8' 6"                          | “ “ |



## ST. PETER'S CANAL, CAPE BRETON.

|  |                                   |
|--|-----------------------------------|
| Construction commenced.....                              | 1854                              |
| “ completed.....   | 1869                              |
| Enlargement begun.....                                   | 1875                              |
| “ completed.....   | 1881                              |
| Length of canal about 2,600 feet.                        |                                   |
| Breadth at water line.....                               | 50 feet.                          |
| Lock.....  | One tidal lock, 4 pairs of gates. |
| Dimensions.....  | 200 feet by 48 feet.              |
| Depth of water on sills.....                             | 18 feet at lowest water.          |
| Depth through canal.....                                 | 19 “                              |
| Extreme rise and fall of tide in St.<br>Peter's bay..... | 7 “                               |

This canal connects St. Peter's bay on the northern side of Cape Breton, Nova Scotia, with the Bras d'Or lakes. It crosses an isthmus half a mile in width and gives access to the Atlantic.....

## BEAUHARNOIS CANAL.

|  |                     |
|--|---------------------|
| Construction begun.....                | 1842                |
| “ completed.....                       | 1845                |
| Length of canal.....                   | 12 statute miles.   |
| Number of locks.....                   | 9                   |
| Dimensions of locks.....               | 200 feet by 45 feet |
| Total rise or lockage.....             | 82½ “               |
| Depth of water on sills.....           | 9 “                 |
| Breadth of canal at bottom.....        | 80 “                |
| Breadth of canal at water surface..... | 120 “               |

As the new Soulanges canal is now opened for navigation, the Beauharnois canal is abandoned for navigation purposes.

## EARLIER CANALS.

A system of three canals preceded the Beauharnois. These were:—

## COTEAU DU LAC CANAL.

|                    |      |
|--------------------|------|
| Construction ..... | 1779 |
| “ completed.....   | 1780 |

## SPLIT ROCK CANAL.

|                             |      |
|-----------------------------|------|
| Construction commenced..... | 1779 |
| “ completed.....            | 1780 |

## CASCADE POINT CANAL.

|                             |      |
|-----------------------------|------|
| Construction commenced..... | 1782 |
| “ completed.....            | 1783 |

The locks were 20 x 6 feet, and provided for a draft of 2 feet. In 1814 the work of widening them to 12 feet was begun, and finished in 1817.



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Two canals were also constructed off Burlington bay, Ontario. They were:

## BURLINGTON BAY CANAL..

|                             |      |
|-----------------------------|------|
| Construction commenced..... | 1825 |
| “ completed.....            | 1832 |

## DESJARDINS CANAL.

|                             |      |
|-----------------------------|------|
| Construction commenced..... | 1826 |
| “ completed.....            | 1837 |

Neither of these canals required locks. They have for many years been abandoned. The depth of water provided in the first instance was  $7\frac{1}{2}$  feet.







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